Nagarjuna College of Engineering and Technology, Bengaluru

(An Autonomous College Under VTU)

1.1.2. Programmes revised during last 5 years

Summary: Board of Studies (BOS) meeting conducted followed by Academic Council and governing body meeting, Syllabus revision and introduction of new courses are discussed during academic year which are to be introduced during the next academic year in presence of experts from industry and academia.

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU

An Autonomous Institute under VTU, Belagavi

NAGARJUNA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Proceedings of the Academic Council Meeting # 07 held on 24.09.2020

The Academic Council Meeting # 07 was held on 24.09.2020 , at 11.00 AM in the Chamber of the Principal.

The agenda for the meeting were as follows:

1. Review of the minutes of the previous meeting.
2. ARIIA and Times Rankings.
3. Introduction of two new UG courses.
4. Permission to attend higher sem classes.
5. Approval of Change in Scheme and Syllabus for the AY 2020-21.
6. Amendments to Regulation.
7. Digital Intervention details during lockdown.
8. Grants (Project / Consultancy).
9. Result Analysis for the AY 2019-20(odd sem).
10. Placement statistics for the year 2019-20 .
11. Graduation Day.
12. State Level Science Fest SCINOVA-2019.
13. Staff & Students' Achievements.
14. MOU & Collaborations.
15. Major activities in the College.
16. Any other matter with the permission of the chair.

The members present:

1	Dr. S . G. Gopala Krishna, Principal	Chairman
2	Dr. G N Mohan Babu, Principal, BMS Institute of Technology, Bengaluru	Nominee of University (VTU)
3	Dr. Nagesh Poojary, Lead Technical Architect, Continental Technical Center, Bengaluru	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
4	Mr. R Anish Simha, Senior General Manager, Rinac India Ltd, Bengaluru	

5	Dr.Jithendra Mungara, Prof. Dean Academic	Teachers representing different level of teaching staff
6	Dr.K. Kumar, Dean(R & D), Prof. in Civil Engineering	
7	Dr. H C Yogeesha, COE & Prof. in Mechanical Engg.	
8	Dr. Nagesh K N, HOD- Dept. of ECE	Member
9	Dr. Anitha Patil, HOD- Dept of CSE	Member
10	Dr. Mamatha G,HOD – Dept of ISE & Director-Training and Placement	Member
11	Dr. Kantharaj.D G, HOD- Dept. of Mechanical Engg	Member
12	Dr. D.L. Venkatesh Babu, HOD- Dept. of Civil Engg.	Member
13	Dr. Poornima U K, Incharge HOD- Dept. of MBA	Member
14	Dr. Srikanta Murthy. K	Special Invitee
15	Dr. P.Harisha , Vice Principal	Member Secretary

Members Absent:

1	Dr. Nanjundaswamy C, Principal, Dr. Ambedkar Institute of Technology, Bengaluru	Nominee of University (VTU)
2	Mr. Deerendra Madhusudhan, Chief Technology Officer, PthinkS, Bengaluru	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
3	Mr.B K Ramesh, Managing Director, Zen Building Solutions Pvt., Ltd., Bengaluru	

Minutes of the Meeting:

Dr. S.G. Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Chairman, Academic Council welcomed all the members to the Seventh Academic Council meeting and initiated the meeting with the presentation as per the agenda.

1. **Review of the minutes of the previous meeting.**

   Dr. S. G. Gopala Krishna, Principal & Chairman Academic Council the reviewed the decisions taken and action taken based on the resolutions of the previous meeting.

2. **ARIIA Rankings:** Chairman informed the members that NCET has got ARIIA rankings in the band of 26-50 under Self-financing institutions and also listed in Times of India Survey. The ranking certificate is furnished in **Annexure-I.**

3. **Two new UG Programmes:** Chairman was happy to announce the commencement of two new courses in UG program- BE in Artificial Intelligence & Machine Learning, BE in Data Science from the Academic year 2020-21 with an intake of 60 each.

4. **Permission to attend higher sem classes.** – Due to COVID-19 pandemic, Semester End Examinations were not conducted for 2nd, 4th and 6th semesters. As per the directions of VTU, the students were permitted to attend higher semester classes. Online Project Viva-voce was conducted for the 8th semester students. Results of the even semester were announced as per the formula given by VTU.

5. **Approval of Change in Scheme and Syllabus for the AY 2020-21.** HODs of various departments presented their new syllabi and suggestions were given by the Industry and academic experts in the panel

   a. **Civil Dept.-** Dr. Venkatesh Babu, HOD-CV presented the scheme of teaching and detailed syllabus for the academic year 2020-21. **Suggestion by Dr. Mohan** – i) Consider offering mandatory audit courses , they have to qualify, which will not be counted for grade points ii) Consider audit courses for other departments of around 20 hours, where it can be helpful to students in having a holistic view of a project. iii) In this regard can commence open and global electives.

   b. **EC Dept.** – Dr. Nagesh K N, HOD-EC presented the scheme of teaching and detailed syllabus for the academic year 2020-21. **Suggestion by Mr. Poojar,** that certain outdated courses may be removed.

   c. **CS Dept.-** Dr. Anitha Patil, HOD-CSE presented the scheme of teaching and detailed syllabus for the academic year 2020-21. **Suggestions were given by Mr.Poojar** regarding introduction of UHV, Python and Placement related , credit courses.

   Dr. Jitendra Mungara, Dean Academics & Prof., CSE asserted that UHV is introduced for 3 credits,1 credit based subject regarding placements, introduced from 3-8th semesters and Python Programming, being provided in an advance manner at each stage, taking care of all the verticals, while being flexible and adaptable.

   d. **Mech. Dept** – Dr. Kanthraj D G, HOD-Mechanical, presented the scheme of teaching and detailed syllabus for the academic year 2020-21. Industry Electives meant to be taught by Industry experts according to panel members.

Dr.Kantharaj, HOD-ME, asserted that the faculty members teaching such electives have been trained by Industry experts. Due to the scope, the subjects are called Industry Electives. Discussion on Solar Energy subject and the changes to be brought in was made. Mr.Anish Sinha suggested courses for other departments, where it can be helpful to students in having a holistic view of a project. He suggested including Industrial perspective, Infrastructure (Electrical and automation) related subjects, as people prefer Single Window System.

After the detailed discussions on the scheme of teaching and syllabus for the academic year 2020-21, it is resolved to approve the scheme and syllabus of all the departments with the modification as suggested from the members.

- Constitution of BoS for departments and their resolution are furnished in **Annexure - II**
- Scheme of UG and PG programmes are furnished in **Annexure - III**

6. **Amendments to Regulation:**

As per the circular from AICTE, it is required to introduce Universal Human Values-II as a Mandatory Course in Undergraduate Engineering Programmes. Hence, it is resolved to include Universal Human Values-II as Mandatory three Credit Course either in 3rd or 4th Semester of B.E. Programmes. Further, as per VTU Autonomous regulations 2018(Amended), the I Grade is defined as students having CIE rating of >=90% and absent themselves for SEE. Therefore, it is resolved to implement the amended guidelines in respect of I grade.

7. **Digital Intervention details during lockdown.-**
   i)   Number of Classes taken - 1000+
   ii)   ii) Attendance in % - 80 to 85%
   iii)   iii) Around 400 + YouTube videos produced, apart from using the other online platforms
   iv)   **Different modes of conduction of CIE**
   - Quiz using Google form with shuffling of questions and options
   - Assignments
   - Written test and softcopy submission
   - Seminars / Presentation
   - Viva

v) Webinars/FDP's organized during lockdown:

- Webinar on Deep Learning by CSE.
- FDP on Virtual lab for Engineering College teachers by MECH.
- Webinar on Millennial Gurus by CSE & ISE.
- Webinar on Positive Attitude and Positive state of mind by ISE.
- FDP on Virtual Lab for Polytechnic teachers by MECH.
- Panel Discussion on Career opportunities by MECH.
- One week Webinars on Industry 4.0 by MECH.
- Webinar on Emotional Intelligence for teachers by MBA.
- Webinar on Recent trends in Network on Chip(NOC) by ECE.
- Webinar on Green Technology for Improving Biodiversity by CIVIL.
- Workshop on Digital Marketing by MBA.
- Webinar on Deflection of Beans by Strain Energy Method by CIVIL.
- Panel Discussion and Webinar on World Environment Day by CIVIL.
- Webinar on Mental Health- Future Wealth by ISE.

8. **Grants (Project /Consultancy).-**Total of ongoing Research projects from last 3 years 1.5 crores collectively received from Mechanical, Civil & EC departments from AICTE AQIS,AICTE MODROBS, BRNS & DST – INDIA-UKERI.

9. **Result Analysis for the AY 2019-20 (odd sem).-** Discussions of all semesters held. It was proposed that the counselors and subject teachers need to give personal attention to students with 3 or more failures.

   The result analysis details are furnished in **Annexure-IV.**

10. **Placement statistics for the year 2019- 20-** Chairman presented the placement statistics of the college for the year 2019-20 and all the members expressed their satisfaction regarding the placement activities of the college. However, members were informed that more efforts are required to improve the placement opportunities to the students.

11. **Graduation Day.-** Chairman informed the members that, due to the pandemic situation, it is not be possible to organize the Graduation day by inviting the students to the campus. In this regard, it is planned to conduct the Graduation Day online. Only Rank holders will be invited to college. Chairman informed the members that total 621 UG and PG students are graduating during the year 2020-21 and sought the approval of the list from the Academic Council. Members of the council expressed their approval for the list of graduating students of the year 2019-20.

12. **State level Science Fest SCINOVA – 2019.-** More than 800 students from 36+ PU colleges participated in the Project Exhibition – 64, Science & Tech Quiz – 189,Tech Talk – 18, Debate – 109, Code Chef –

13. **Staff & Students' Achievements.**-3 staff members awarded Ph.Ds, 61 pursuing, 4 awarded from our research centre. 6 books published, 1 patent received. Dr. Venkatesh Babu D L, HOD, Department of Civil Engineering has given talk on Role of Chemical Admixtures in Concrete Constructions during Master training Session on Project Management training for District Nirmithi Engineers held at VTU regional centre, Muddenahalli on 03.02.2020. Dr. Prachi Beriwala, Prof. & HOD-MBA attended International conference on Business, Management & Entrepreneurship at Dhaka.

14. **Students' Achievements:** Chairman highlighted the achievements of the students to the members of the academic council. Students of Mechanical Engineering won Second Prize in Boeing- IIT National Aeromodelling Competition held at IIT, Madras. Students of Mechanical Engineering won Second Prize in World Robotics Championship held at New Delhi. ME student Mr.Bibek Sharma presented a technical paper in ASHRAE conference, Jordan.CSE students Ms. Harshini Eggoni & Mr. Sreerajavenkatareddy Velagala attended the 2nd World Summit on Advances in Sciences, Engineering & Technology, Indiana Summit 2019 in Indianapolis, Indiana, USA presented paper during the summit.

15. **MOU & Collaborations-** Chairman informed the members that MOUs were signed with Dynamic Tek, Toyota kirloskar, Course cube NCC, Spaneos, Bosch, Diu, Autodesk, NSDC, National Instruments, SSSIHL,MTC Global,EMC,Oracle,ISRO,TCSiON,,Texas Instruments and VmWare. Members of the Academic Council expressed their happiness over the collaborations with the industries and other reputed oganizations.

16. **Major activities in the College-** Principal briefed the different activities conducted by the college and achievements of the staff & students in academics, co-curricular & sports activities in the Academic year 2019-20. Council congratulated all coordinators who had successfully conducted the events and achieved excellence in the different activities. List of major activities and achievements are given in **Annexure V.**

17. **Any other matter with the permission of the chair:**

    a) Chairman proposed the closure of UG courses in Mechanical Engineering & Information Science & Engineering from the A.Y.2021-22 and the Academic Council approved the same.

    b) Chairman informed the members that a request is received from Mr. Mounananda Reddy S, from Sai Vidya Institute of Technology, Bengaluru from ISE Branch, VTU stream to Nagarjuna College of Engineering & Technology, Bengaluru , Autonomous stream in CSE-Branch.

    c) Request is received from Mr.Dinakar G, from Alpha College of Engineering, Bengaluru from CSE, VTU stream to Nagarjuna College of Engineering & Technology, Bengaluru, CSE Autonomous stream .

The chairman informed the members that the students' request would be processed as per the regulations of VTU regrading change of college and change of college with change of branch.

ACM # 07

As there was no other point to discuss, Chairman, Dr S G Gopala Krishna, thanked all the members of the Academic Council for their active participation and useful suggestions.

ANNEXURE II

Board of Studies
Department of Electronics and Communication Engineering

BOS Meeting for finalizing scheme for 3rd, 4th, 5th, 6th, 7th and 8th semester of ECE Dept on 23.04.2020

The Details of the Members present in meeting

SI No	Name of Faculty	Designation
1	Dr. S G Gopala Krishna	Director, NCET
2	Dr. Srikanta Murthy K	Principal, NCET
3	Dr. Harisha P	Vice Principal, NCET
4	Dr. Jithendra Mudugur	Dean Academics, NCET
5	Dr.Nagesh K N	Professor and HOD, NCET
6	Dr. H Venkatesh Kumar	Professor, NCET
7	Dr.Premjyoti G.Patil	Professor, NCET
8	Dr.Wilfred John Vaz	Professor, NCET
9	Dr. Basavaraj G.M	Associate Professor, NCET
10	Dr. Rohith S	Associate Professor, NCET
11	Mrs. Bhavya.V	Associate Professor, NCET
12	Mrs. Roopa.G	Associate Professor, NCET
13	Mr. C.V Nanda Kishore	Assistant Professor, NCET
14	Mr. Vinay Kumar S R	Assistant Professor, NCET
15	Mr. Kasetty Ram Babu	Assistant Professor, NCET
16	Mr. Mahesh M R	Assistant Professor, NCET
17	Mr. Sunil Kumar B S	Assistant Professor, NCET
18	Ms. Sunitha.M	Assistant Professor, NCET
19	Mr. Harish V	Assistant Professor, NCET
20	Ms. Hemalatha B	Assistant Professor, NCET

ACM # 07

21	Mr. Shashikiran R	Assistant Professor, NCET
22	Mr. Sreenivasulu K N	Assistant Professor, NCET
23	Mrs. Sreevani N	Assistant Professor, NCET
24	Ms. Jyothi S K	Assistant Professor, NCET
25	Dr. Rajesh Kumar	VTU BOS Nominee, Professor, NMIT
26	Mr. Vishwas J B	Manager, Universal Electronics, Bangalore

Minutes of Meeting

- BOS meeting for finalizing the scheme and syllabus for 3rd and 4th year ECE students was scheduled on 23rd April 2020.
- The online meeting was schedules using ZOOM App
- Zoom Meeting ID: 995 7608 6632 and link for BOS meeting
  https://zoom.us/j/99576086632?pwd=dzZpdU9SQUFMbGRvQWw2UEwwK1ZEdz09
- 30 participants were actively involved in BOS meeting including all the members of BOS along with BOS chairman, External BOS nominee, Industry BOS member ,Dean academics, Vice-Principal, Principal and Director sir.
- BOS chairman/ HOD presented the scheme of syllabus for 5th, 6th, 7th and 8th semester framed for students of ECE in the BOS meeting.
- The total credits per semester and scheme was framed keeping in view the guidelines of VTU and AICTE norms.
- The Subjects for foundation elective, Engineering elective and Open elective were presented in the meeting.
- The scheme of syllabus was greatly appreciated by all the members in the BOS panel.
- The VTU BOS nominee Dr. Rajesh Kumar from NMIT, Mangalore enlightened the importance of core ECE subjects and their importance in the current Industry.
- Industry BOS member, Mr. VISHWAS J B for Universal ELECTRONICS PVT LTD shared his views as the industry requirements should match the syllabus in the academics. He highlighted the importance of certification courses and trends in current industry.
- The scheme and syllabus was approved by all the members in the panel.

Board of Studies

Department of Computer Science & Engineering
&
Department of Information Science & Engineering

Minutes of the combined Board of Studies meeting of CSE & ISE held on 5th May, 2020 at 2.30M through Zoom due to the COVID 19 lockdown. Following members were present during the meeting.

The Details of the Members present in the meeting

Sl. No.	Name	Affiliation	Designation in the Board
1	Dr Gopal Krishna	Director, NCET, Bengaluru	Special Invitee
2	Dr. Suresh L	Principal, Cambridge Institute of Technology, Bengaluru	Member
3	Dr. Mamatha H R	Professor, CSE, PES University, Bengaluru	Member
4	Mr. Bhargav Sridhar	Software Engineer, IBM, Bengaluru	Member
5	Dr. Srikanta Murthy K	Principal, NCET, Bengaluru	Member
6	Dr Jitendranath Mungara	Dean,NCET,Bengaluru	Special Invitee
7	Dr. Mamatha G	Professor & Head, ISE, NCET, Bengaluru	Member
8	Dr. Shantakumar B Patil	Professor, CSE, NCET, Bengaluru	Member
9	Dr. Gururaj Murtugudde	Professor CSE, NCET, Bengaluru	Member
10	Mrs. Prabha S N	Associate Professor, CSE, NCET, Bengaluru	Member
11	Mrs. Swathi S	Associate Professor, CSE, NCET, Bengaluru	Member
12	Mr. Gopinath A R	Associate Professor, CSE, NCET, Bengaluru	Member
13	Mrs. Bhagya M	Associate Professor, CSE, NCET, Bengaluru	Member
14	Mr. Ashok S Patil	Associate Professor, ISE, NCET, Bengaluru	Member
15	Mr. Kishore P J	Associate Professor, ISE, NCET, Bengaluru	Member
16	Dr. Premjyoti Patil	Professor, E&CE, NCET, Bengaluru	Member
17	Mrs. Kavitha G	Assistant Professor, Mathematics, NCET, Bengaluru	Member

Absent:

Sl. No.	Name	Affiliation	Designation in the Board
1	Mr. Chandrappa	Associate Director Projects,Cognizant	Member
2	Mr. Krupesh Bhat	CEO and Founder,Legal Desk	Member

Resolution of the BoS Meeting – CS & IS
Minutes of Board of Studies Meeting held on 05.05.2020

Prof. (Dr) Anitha Patil,HoD CSE ,Chaired the meeting and expressed her gratitude for presence of all members and welcomed all the members to the BoS meeting. She has given the introduction of all members to the board. She welcomes all external members who have attended the meeting despite of various busy schedules.

At the outset, she informed the members about the academic activities and newly introduced courses in CSE & ISE. Having confirmed the quorum of the meeting, the agenda of the meeting was taken up for discussion.

The follow points were discussed and suggested by the members during the meeting:

1. **Dr. Suresh L**, Principal,Cambridge Institute of Technology, Bengaluru was suggested the following

   ➢ 25% of the curriculum has to be done by online courses.
   ➢ Proper rubrics needed to justify the evaluation process of 8thsem project work and internship program.
   ➢ Angular JS and Human Computer Interaction can be substituted with other subjects.
   ➢ Software Engineering has to be studied in the beginning of 3rd year.
   ➢ Dataware house and Mining/ Machine learning subjects can have 1credit for case study or to design a mini application program.

2. **Dr. Mamtha H R**, Professor, PES University, Bengaluru, was suggested the following
   ➢ Operating System should be a core subject rather than elective.
   ➢ Natural Language processing subjects can be added to the curriculum.
   ➢ Overlapping of course content to be avoided.
   ➢ Software Engineering has to be studied in the beginning of 3rd year.

3. **Mr Bhargava Sridhar**, Software Engineer, IBM, Bengaluru, was suggested the following
   ➢ Operating System can be retained as core course.
   ➢ Devapp can be introduced as per the Industry demand.
   ➢ Mobile application can be studied through online course.
   ➢ Javascrpit can be given more weight age in Web Technology course so that angular JS can be opted out.
   ➢ 8-12 weeks of internship is recommended to students.

4. **Dr. Gopalakrishna S G**, Director, NES,Bengaluru,was suggested the following
   ➢ Eight(upto 12 weeks) weeks of internship to 3rd year students, either at the end of 6th semester or before 7th sem. Internship in company or at their workplace incase if student is placed during this period.
   ➢ Evaluation of the internship has to be done only in 8thsem.
   ➢ Internship can have 3 credits and proper report should be maintained by students.
   ➢ 8th semester students should do online certification course and a seminar on the same can be done at the semester end.

5. **Dr. Srikantamurthy K**, Principal, NCET, Bengaluru,was suggested the following
   ➤ Academic curriculum should be a combination of online courses, self-study courses and class room teaching.
   ➤ Angular JS can be replaced by Digital Image Processing course.

6. **Dr. Mamtha G**, Director of Placements and Professor and HOD, ISE NCET, Bengaluru, suggested that Courses has to be added based on present job market scenario.

With the above discussion, the Head of the Centre expressed her deep sense of gratitude to all members for an academic vibrant discussion on scheme and syllabus from 5th to 8th semester for academic year 2020-21. The meeting ended with vote of thanks by Chair.

Board of Studies
Department of Mechanical Engineering

Sl. No.	Category	Name	Affiliation	Designation in the Board
1.	Chairman	Dr. N. Kapilan	Professor & Head, ME, NCET, Bengaluru	Chairman
2.	Faculty Members	Dr. D.G. Kantharaj	Professor, NCET, Bengaluru	Member
		Mr. L.J. Naik	Associate Professor ME, NCET, Bengaluru	Member
		Mr. Shashikanth G. S.	Assistant Professor, ME, NCET, Bengaluru	Member
		Mr.Prashanth Kumar	Assistant Professor, ME, NCET, Bengaluru	Member
		Mr. Balaji Y.S.	Associate Professor ME, NCET, Bengaluru	Member
3.	Subject experts nominated by Academic Council	Dr. Jagadeeshwaran N	Professor, School of M.E., Reva University, Bengaluru.	Member
4.	Expert nominee by Vice-Chancellor, VTU	Dr. Vasudeva Madav	Professor, ME,NIT, Surathkal	Member
5.	Expert from Industry nominated by Academic Council	Mr. Mittakola Venkanna	Director, Product Engineering, Ingersoll Rand Technologies and services private Ltd., Bengaluru.	Member
6.	Meritorious Alumnus	Mr. Mahesh C. P.	Engineer, Rolls Royce Bengaluru.	Member
7.	College Co-opts	Dr. Premjyoti Patil	Professor, E&CE, NCET, Bengaluru	Member
		Mr. Kavitha G	Professor, Mathematics, NCET, Bengaluru	Member

Resolution of the BOS Meeting – ME
Minutes of Board of Studies Meeting held on 22.04.2020

Proceedings of the BOS meeting

The BOS meeting was convened through zoom application as a result of lockdown due to prevailing global pandemic COVID-19 on 22-04-2020. Dr. N. Kapilan, Chairman, BOS of Mechanical Engineering Department welcomed the members of the BOS for the meeting along with the special invitees Dr. S.G. Gopala Krishna, Director, NES, Dr. Srikanta Murthy K, Principal, NCET and Dr. Jitendra M, Dean Academics, NCET. The following were the agenda of the meeting.

Agenda:
1. MOM of previous meeting
2. Proposal of Scheme and Syllabus from 5th to 8th semester
3. Proposal of Syllabus of 1st and 2nd semester MEF and CAED Courses
4. Review of Academic Activities
5. Any other academic points

Dr.N.Kapilan, Chairman welcomed all the BOS Members and staff members for the meeting and he briefed the minutes of meeting of the previous BOS meeting, overview of the scheme and syllabus of other premier institutions and agenda.

Dr.N.Kapilan also explained the methodology followed in drafting the scheme and syllabus for the 5th to 8th semester of B.E. Mechanical Engineering programme. He also detailed the drafting process where AICTE Model curriculum is considered as base in deciding the credits for the various courses as total credits were reduced from 200 to 175, suggestions received in previous BOS meeting and feedback received from various professional societies, alumni, faculty members and parents.

The staff members in the department were divided in to four different groups based on their specialization like design, thermal, manufacturing and Interdisciplinary. Each group of staff members had thoroughly gone through the scheme and syllabus of premier institutions, VTU, JNTU and other Autonomous colleges. They had series of meetings and debated each syllabus and drafted the final syllabus of their group and send it to the department meeting and department advisory board. Each group have presented their syllabus during department meeting and finally scheme and syllabus was finalized and was forwarded to department advisory committee for the approval. The department advisory committee has gone through the scheme and syllabus and given few suggestions which was accepted. The finalized scheme and syllabus was sent to department BOS meeting.

ACM # 07

The chairman of BOS presented the draft scheme and syllabus and the teaching and learning process o be followed for effective student learning processes to the BOS members and requested the BOS members to give their suggestions. After through scrutiny of the presented scheme and syllabus the BOS members had made the following comments / suggestions and approved the revised scheme and syllabus.

1. The BOS members appreciated the inclusion of subjects like python for mechanical engineers in 5th semester, Applications of IOT in mechanical engineering in 6th semester and Machine learning and data analytics as engineering elective in 7th semester as suggested in previous BOS meeting.

2. A thorough discussion was done on "python for mechanical engineers" and BOS members approved the same with no corrections and suggested to see that it should be thought by CS or IS department.

3. All the members debated on course "Applications of IOT in mechanical engineering" and finally concluded as the course should be renamed as IIOT (Industrial Internet of Things) with small modifications in the course content.

4. BOS members felt "Machine Learning and Data Analytics" course is very vast and suggested to change the course and limit it to just "Data Analytics".

5. The BOS members appreciated the integrated course concept that was framed by the department in the areas of Design Engineering, Thermal Engineering and Manufacturing Engineering as they provide good exposure for the students in the respective areas of engineering.

6. The BOS members also suggested to check the possibility of making the 3D printing course as Integrated.

7. The BOS Members suggested include topics of NOISE in mechanical vibration.

8. BOS members asked to check the possibility of reshuffling the subjects like introducing the subjects like HMT and Mechanical Vibrations in 5th or 6th semester rather than in 7th semester which helps students to focus on project work and placements.

9. One of the BOS member MR. Venkanna suggested introducing the HMT course before R&AC course as HMT forms foundation for understanding R& AC.

10. OS members also appreciated the inclusion of courses like Non Destructive Testing, Solar Energy and Design of transmission elements in the curriculum and approved the same.

11. The committee suggests that the students shall select industry internship to enhance their employability.

12. The BOS members appreciated the online courses offered to the students.

13. The BOS members approved the courses Mechanical Engineering Foundation (I C) and Computer Aided Engineering Drawing with no modifications.

Finally all other courses were approved with minor modifications and the scheme and syllabus of 5th to 8th semester were forwarded to Joint BOS Meeting. The chairman of the BOS thanked all the BOS members and staff for their valuable suggestions and inputs.

Board of Studies
Department of Civil Engineering

The Board of Studies Meeting was held on 10th June, 2020 at 10:00 AM. The following members were present during the meeting,

Sl. No	Name	Designation	Remark
1	Dr. D. L. Venkatesh Babu	Professor & Head, Department of Civil Engineering, NCET	Chairman
2	Dr. P.S. Niranjan	Professor & Head of the Department, New Horizon College of Engineering	Member (External - VTU Nominee)
3	Dr. Ramesh. B. R	Professor and Head, Department Civil Engineering NMIT	Member (External-Academia)
4	Dr. B. C. Udayashankar	Professor, Department Civil Engineering RVCE	Member (External-Academia)
5	Er. Sunil. R. K	Fonder & CEO, 3E-SERVICES, Bengaluru.	Member (External from Industry)
6	Mr. Sai Manohar	Project Engineer at Sri Sathya Sai Loka Seva Group of Institutions.	Member (Illustrious Alumni)
7	Mr. Karthik Patel. M. G	Project Engineer at Prashanthi Bala Mandir Trust	Member (Illustrious Alumni)
8	Dr. Jitendra Mungara	Dean-Academic, NCET	Internal Member
9	Dr. K. Kumar	Prof./Dean-R&D, NCET	Internal Member
10	Dr. V. Harish	Professor	Internal Member
11	Dr. Lairenlakpam Pinky Devi	Associate Professor	Internal Member
12	Mr. Divya Srinath	Associate Professor	Internal Member
13	Mr. Sanath Kumar K R	Associate Professor	Internal Member
14	Dr.Manohar. D. R	Associate Professor	Internal Member
15	Dr.Nagaraj. V. K	Associate Professor	Internal Member
16	Mr. Mandeep. B.V	Assistant Professor	Internal Member

Resolution of the BOS Meeting - CV
Minutes of the Board of Studies meeting held on 10.06.2020

Agenda of BOS meeting

At the onset, Chairman welcomed the members of BOS meeting and informed the house that the department terms have been working on the revision of curricula and in this direction the meeting was conducted with the experts from academia and industry along with the illustrious alumni's. The Chairman listed the following agenda,

1. Presentation of 19CV Scheme and Syllabus from III to VIII semester by the HOD.
2. Presentation of 18CV Scheme and Syllabus from V to VIII semester by the HOD.
3. Presentation of 20CV Scheme and Syllabus of M. Tech. Structural Engineering (CSE) from I to IV semester by Dr. Harish. V.
4. Presentation of 20CV Scheme and Syllabus of M. Tech. Construction Technology and Management (CCT) from I to IV semester by Dr. L. Pinky Devi.
5. Approval of the Scheme and Syllabus.
6. Any matters related to the Curriculum design.

The following deliberations were made as per the circulated agenda,

1. **To consider and approve the Curriculum and Syllabus for B.E (19CV)**

The Chairman elaborated the following,

- Detailed explanation was given on Intergraded Course (IC) and described why two IC's are given per semester.
- Explained the types of electives (Foundation, Engineering and Open electives) prescribed by the institution. Discussed the necessary of the electives and why the electives are kept from 3rd semester. A brief summary was given on why theoretical electives will be conducted online.
- Described the importance of Technical Report Writing & IRDP and its credits.
- Discussed the course Career Skill Development Programme and its importance w.r.t placement.
- As per AICTE MHRD, Universal Human Values course has been included in the Syllabus.
- Listed the Engineering electives prescribed by the department such as Renewable Energy, Solid Waste Management, Remote Sensing and GIS, Infrastructure Planning and Smart Cities.

- Delineated that the department is offering online certified courses from IIT/ IISc/ SWAYAM and NPTEL. The course Basics of RS, GIS & GNSS (Open Elective) is conducted by the expertise from ISRO.
- In the interest to improve the skills of students to crack interviews General Aptitude, Technical Aptitude and GD is introduced in the Syllabus.
- In order to help the students w.r.t project work in 8th semester Concrete and Geotechnical Labs are included in 7th semester.
- Explained how management is supporting the students for internship and tanning at Nagarjuna Construction Company (NCC).
- Technical Seminar (individual seminar) has been introduced in 18CV Syllabus.
- Conduction and marks distribution of CIE, AAT and SEE were discussed.

2. **To consider and approve the Curriculum and Syllabus for B.E (18CV)**

The Chairman elaborated the following,

- The syllabus is similar to 19CV. But, the difference is Fluid Mechanics is Intergraded Course in 5th semester and Software Labs are introduced in 5th, 6th and 7th semesters.

3. **To consider and approve the Curriculum and Syllabus for M. Tech. Structural Engineering (20CV)**

Dr. Harish. V (Professor and PG Coordinator) elaborated the following,

- Technical Seminars has been introduced in 2nd and 3rd semesters.
- Dissertation Phase 1 has been introduced in 3rd semester.
- Internship/Term paper/Mini project presentation has been introduced in 3rd semester.
- The students are mainly made to concentrate on project work and spend time in publications, so no subjects are introduced in 4th semester.

4. **To consider and approve the Curriculum and Syllabus for Construction Technology and Management (20CV)**

Dr. L. Pinky Devi (Associate Professor) elaborated the following,

- Discussed the subjects names has been changed from
    o Energy and Buildings to Sustainable Construction.

- o   Building Science to Design of Energy Efficient Buildings.
- o   Construction Quality and Safety to Construction Quality and Safety.
- Explained the lately introduced subjects and its importance. The lately introduced subjects are as follows,
  - o   Risk and Material management in 1st semester.
  - o   Lean Construction and Supply Chain Management in 2nd semester.
- Technical Seminars has been introduced in 2nd and 3rd semesters.
- Dissertation Phase 1 has been introduced in 3rd semester.
- Internship/Term paper/Mini project presentation has been introduced in 3rd semester.
- The students are mainly made to concentrate on project work and spend time in publications, so no subjects are introduced in 4th semester.

RESOLUTION

The BOS Committee resolved to recommend the following recommendations to the Internal Academic council for the Curriculum structure and Syllabus for B.E Civil Engineering (19CV and 18CV).

Recommendations from Er. Sunil. R. K

- The courses such as Aadalitha Kannada/ Vyavaharika Kannada, Universal Human Values, Tax Management and certified courses from IIT/ IISc/ SWAYAM and NPTEL have been appreciated.
- Tax Management course has to be incorporated in Engineering Elective. This course will ensure the students to access knowledge on various avenues for tax planning and tax management in construction sector and also it aids in understanding various exemptions and loopholes in Indian Tax Act.
- Spiritual Knowledge course has to be introduced in Open Elective as this course will release the mental stress on the students and ensures wisdom of spirituality among the students.
- The course Fluid Mechanics has to be more oriented towards field/ site scenario and the students should be taken to site visit for better understanding of the course.
- In Engineering Elective along with course Non Destructive Testing, Partial Destructive Testing can be introduced this will be beneficial to Civil Engineering students.
- The concept of labour loss should be introduced in Construction Management and Engineering Economics (Foundation Elective), as it plays an important role in construction sector.

– Structural Consultants and Project Management Consultants should be invited for software training and to deliver guest lectures on improved techniques in the respective fields.

Recommendations from Dr. K. Kumar

– Courses in electives similar to Core Courses have to be replaced with other courses.
– Labs should be given 3 credits instead of 2 credits.

Recommendations from Dr. P.S. Niranjan

– In 8th semester the L-T-P-S for Project Phase – II & III and Evaluation and Viva Voce should be altered.
– Theory subjects have to be introduced in 8th semester.
– All Foundation Electives introduced in 3rd semester should be shifted to 6th/ 7th semester.
– Subject matrix should be added as per UGC.
– The electives can be grouped depending on stream viz., structural group, highway group, geotechnical group and environmental group.
– Building Materials and Concrete Technology, Advanced Concrete Technology and Pre Stressed Concrete Structures should be made core subject from Foundation Elective.
– Non Destructive Testing can be given as Engineering Elective from Civil Engineering Department.

Recommendations from Dr. Ramesh. B. R

– The marks in courses such as Technical Report Writing & IRDP and Aadalitha Kannada/ Vyavaharika Kannada should be reduced from 100 marks to 50 marks.
– As Self Study is not mentioned anywhere L-T-P-S can be renamed as L-T-P.
– The credits in Basic Material Testing Laboratory should be changed from 3 credits to 4 credits.
– The numbering given for Foundation, Engineering and Open electives are confusing, find other way for labelling the electives.
– Hydrology and Irrigation Engineering and Water Resources Engineering should be made as core subject from Foundation Elective.
– The course Railways, Harbours & Tunnels should be split into two courses as Railways Engineering and Harbours & Tunnels. Railways Engineering should be made as core subject and Harbours & Tunnels as Foundation Elective.
– Courses should be reshuffled as students should know the basics of each and every course.

- The credits for project should be reduced.

Recommendations from Dr. B. C. Udayashankar

- Bridge Engineering/ Design of RC Bridges should be introduced.
- Design of Substructures/ Design Concepts of Substructures should be introduced.
- Basics courses related to all the streams should be introduced as core subject or in electives.

Recommendations from Mr. Sai Manohar

- The course Estimation and Valuation should be linked and explained as per Code of Practise.

The BOS Committee resolved to recommend the following recommendations to the Internal Academic council for the Curriculum structure and Syllabus for M. Tech. Structural Engineering (20CV) and Construction Technology and Management (20CV).

Recommendations from Er. Sunil. R. K

- The course Advanced Structural Analysis should be introduced.
- Forensic Science and Law/ Forensic Structural Engineering should be introduced.

Recommendations from Dr. Ramesh. B. R

- L-T-P-S has to be changed in 4th semester as it is mismatching.
- The courses such as Smart Materials and Sustainable Materials has to be introduced in Construction Technology and Management as these are the most highlighted courses in current scenario.

Recommendations from Mr. Karthik Patel. M. G

- The course Design of Precast & Composite Structures (Elective) can be introduced as Core subject.
- The course Mechanics of Deformable Bodies (Core subject) can be shifted to Elective.

Recommendations from Dr. P.S. Niranjan

- The marks for courses with 2 credits can be lowered from 100 marks to 50 marks.
- The L-T-P-S for project work in 4th semester should be removed and only credits should be kept.

The Board of Studies meeting was concluded by a brief formal expression of thanks to Chairman, Members (External - VTU Nominee), Member (External from Industry), Members (Illustrious Alumni) and Internal Members from Dr. V. Harish.

Board of Studies
Department of Basic Science

Sl. No	Category	Members	Designation	Designation on Board
1.	Chairman	Dr. Harisha P	Prof.& Vice-Principal, NCET	Chairman
2.	VTU nominee	Dr. Fakruddin Khasim	Prof & Head, Dept of Basic Science, Ghousia College of Engineering, Ramanagaram.	Member
3.	Subject Expert nominated by Academic Council	Dr.K.N.Uday Kumar	Prof. Dept of Mathematics, REVA university, Bangalore.	Member
4.	Expert from Industry nominated by Academic Council	Dr. Ganesh B M	Group Leader-Analytical, BIONEEDS INDIA PRIVATE LTD. Peenya, Bangalore.	Member
5.	Faculty	Dr. M V Sarvesha	Prof. & HOD, Dept of Mathematics, NCET	Member
6.	Faculty	Mr. Ramesh Gowda	Associate Prof. Dept of Mathematics,NCET	Member
7.	Faculty	Dr. Manjunatha K	Prof. & HOD, Dept of Chemistry,NCET	Member
8.	Faculty	Dr. Harish K N	Associate Prof. Dept of Chemistry, NCET	Member
9.	Faculty	Prof. Sharada T	Associate Prof. & HOD, Dept of Physics, NCET	Member
10.	Faculty	Smt. Archana B S	Asst Prof. Dept Of Physics, NCET	Member
11.		Dr. Yogeesha H C	COE, Professor in Dept of Mechanical Engineering	Member
12.	Co-opts from college	Dr. Shantakumar Patil	Professor, Dept of CSE	Member
13.		Dr. Venkatesh Kumar	Professor, Dept of ECE	Member

Resolution of the BOS Meeting – Basic Science
Minutes of Board of Studies Meeting held on 29.06.2019

A meeting was held on **29.06.2019** with the members of the BOS - Basic Science & Humanities department for finalizing first year syllabus for Calculus and Linear Algebra(20MAT11), Differential Equations and Statistical Methods(20MAT21), Engineering Physics(20PHY12/22), Engineering Physics Lab(20PHL16/26), Engineering Chemistry(20CHE12/22) , Communication Skill development –I (20CSD17)and Communication Skill development II(20CSD27), for the academic year 2020-21 and also 3rd semester subjects –Fourier series ,Transforms and Numerical Techniques (19MAT31) Constitution of India Professional Ethics and Human rights and Adalitha Kannada and Vyavaharika kannada(19KAK39/49), 4 th sem subjects Applied Calculus and Probability theory(19MAT41) and 5th /6th sem subject -Environmental Studies (18ENV58/68). Also syllabus of Additional Mathematics-1(19MATDIP-1) & Additional Mathematics-2(19MATDIP-2) were finalized. Minor corrections were made after going through the syllabus thoroughly in the respective subjects. Consequently, syllabuses for the respective subjects were finalized for the academic year 2020-21 and were forwarded for the approval from the Academic Council

Board of Studies
Department of Master of Business Administration

Sl. No.	Category	Name	Affiliation	Designation in the Board
1.	Chairman	Mrs. Poornima U. K	Associate Professor, MBA, NCET, Bengaluru	Chairperson
2.	Faculty Members	Dr. Vala Ghanshyam Kantilal	Professor, MBA, NCET, Bengaluru	Member
		Dr. Dhakshayini K.N.	Professor, MBA, NCET, Bengaluru	Member
		Mr. Muralikrishna	Associate Professor, MBA, NCET, Bengaluru	Member
		Mr. Lokesh G.R.	Assistant Professor, MBA, NCET, Bengaluru	Member
		Ms. Rajeshwari G.V.	Assistant Professor, MBA, NCET, Bengaluru	Member
		Mr. Sriram S.	Assistant Professor, MBA, NCET, Bengaluru	Member
		Dr. Biraj Ameet Anil	Assistant Professor, MBA, NCET, Bengaluru	Member
		Ms. Seema B.	Assistant Professor, MBA, NCET, Bengaluru	Member
3.	Subject experts nominated by Academic Council	Dr. Prachi Beriwala	Professor, Centre for Management Studies, Presidency College, Bengaluru	Member
4.	Expert nominee by Vice-Chancellor, VTU	Dr. Raveendra P.V.	Professor & Head, Department of MBA, M.S. Ramaiah Institute of Technology, Bengaluru	Member
5.	Expert from Industry nominated by Academic Council	Dr. M. R. Bharadwaj	Head-Business Development, Helio Engineering (P) Ltd., Bengaluru	Member
6.	Meritorious Alumnus	Mr. Sanjay	Manager, TCS, Bengaluru	Member
7.	Special Invitees	Dr. S. G. Gopala Krishna	Principal, NCET, Bengaluru	Member
		Dr. P Harisha	Vice Principal, NCET, Bengaluru	Member
		Dr. Yogeesha H.C.	Controller of Examinations, NCET	Member
		Dr. Jithendra Mungara	Dean- Academics NCET, Bengaluru.	Member
		Dr. Kumar	Dean- Research and Development, NCET, Bengaluru.	Member
		Dr. Harish Babu S	Professor and Head, Department of Management Studies, NMIT, Bengaluru.	Member
		Dr. Geethanjali	Acharya Institute of Management, Bengaluru	Member

Resolution of the BOS - MBA
Minutes of Board of Studies Meeting held on 14.09.2020

➢ *Proceedings of the meeting:*

Mrs. Poornima U K, Associate Professor, Department of MBA and Chairperson, Board of Studies, welcomed the members and gave a quick insight of the Curriculum designed for the Academic year 2019-2021 and 2020-2022. The discussions that happened after the presentation are given as follows:

- *Agenda Point #1 and 2: The new pattern of the Syllabus 2020-2022 was presented by Mrs. Poornima U K, Chairperson, BOS.*

- *Agenda Point #2: Presentation of III & IV Semester syllabus for 2019-21 Batch of MBA by Mrs. Poornima U K, Chairperson, BOS.*

- *Introduction of New Elective (Logistics and Supply Chain Management) for III & IV Semesters.*

1. After the presentation the syllabus of 2019-2021, the syllabus was finalised with minor changes. Those changes were related to the content of the subjects and respective subject matter experts noted them. It was finalised that not to offer Strategic Financial Management paper in finance specialisation and replace it with **Goods and Services Tax (GST).** This suggestion was given by Dr. P V Raveendra, VTU nominee.

2. After the presentation the syllabus of 2020-2022, the syllabus was finalised with following suggestions:

Suggestions by Dr. P.V. Raveendra:

a. Continue with the existing scheme of valuation in which 50% weightage is given to CIE and 50% for SEE. Within CIE, the pattern to be adopted is 60:40 (Test: AAT)

b. The proposed syllabus consists of 3 seminars. He proposed 2 seminars and one course on soft skills for employability. But, in the proposed syllabus it has already been incorporated as zero credit course in all the semesters.

c. Credits offered in total for Internship and Project Work were 16 Credits. He suggested to reduce the credits and introduce a new core paper. It was discussed and finalised to go with the proposed 16 credits for the same.

d. No Marks to be given for attendance was suggested by him and accepted by the Board.

e. Two tests to be given for students for CIE. Makeup CIE can be offered in case of Medical Emergency, any other Genuine reasons and recommended by the counsellors.

Suggestions by Dr. M.R. Bharadwaj:

a. Internship and Project work need to be taken seriously by students. It was suggested that there should be a framework external assessment by the guide in organisation and the same should be reflected in assessment rubrics.

b. It was also suggested that once in a fortnight or a month, the concerned guide shall visit the organisation to review the progress. It was finalised by the BOS that visit may be possible for the companies located in and around Bengaluru by the faculty members.

In case of projects undertaken by students other than Bengaluru, project review can be done by the Guide virtually.

c. It was also suggested that if a linkage can be established between Internship and Project work. It was accepted by the BOS and deliberation took place in connection with implementation of it. BOS finalised to go ahead with the linkage provided they get permission from the company well in advance.

Suggestions by Dr. Harish Babu S:

a. Dr.Babu appreciated offering of Logistics and Supply Chain Management as specialization for the batches 2019-21 and 2020-22.

b. He suggested to offer Business Analytics as a specialisation for the batch 2020-2022. It was accepted by the BOS and subject matter experts need to be identified to frame the syllabus.

c. He also suggested to include discussions and debates on regular basis for the students on current affairs and that it should be included in the time table. The same was accepted by BOS.

d. MOOC courses may be introduced as an alternative to assignment and it was finalised by the BOS that it shall be included as one of the options for the internal assessment of the students.

e. It was suggested that in every area of specialization one certification course shall be introduced by the industry experts and the same can be included as zero credit course.

Suggestions by Dr. S G Gopalakrishna:

a. He stated that offering of two credits for Seminar and the consequent monitoring shall be a tedious task. It was suggested that students shall be put in smaller groups monitored by the counsellor for assessment. The same was reiterated by Dr. Harish Babu and accepted by BOS.

b. Discussion and Debate among students shall be on Current Affairs and the same to be monitored in activity classes. The same was accepted by BOS.

c. The MBA program need to be industry oriented which in turn gives practical exposure and real time experience for the students.

Suggestions from Members of BOS:

a. It was suggested by the BOS members that entrepreneurship development activities have to be done by offering certification program/courses by prestigious organisations (Assocham, MSME, CII, SEWA, Skill India) and creating an active ED cell.

b. The Department will consider the option of freelance working or working at NGOs if required, for the final semester projects.

ACM # 07

c. Members of BOS are of the opinion to introduce a greater number of certification courses relevant to the areas of specialization to bridge the skill gap and also to integrate the MOOC courses into the curriculum which are offered by reputed institutions that support blended learning.

d. It was proposed to introduce a foreign language, as a zero credit course .

All the faculty members were appreciated for their efforts made by the members in drafting the new syllabus considering the current industry requirements.

3. **Introduction of New Elective (Logistics and Supply Chain Management) for III & IV Semesters.**
   All the members of the BOS agreed to introduce the new elective.

Mrs. Poornima U K, Associate Professor, Department of MBA and Chairperson, Board of Studies summarized the discussions in the meeting and proposed the vote of thanks. She also requested the members for their continual support.

ANNEXURE III
Scheme of UG and PG programmes

Scheme of the 1st & 2nd Year UG programmes 2020-21

First Semester – Physics Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	20MAT11	Calculus and Linear Algebra	MAT	3-2-0-0	4	100
2.	20PHY12	Engineering Physics	PHY	3-0-0-0	3	100
3.	20CEF13	Civil Engineering Foundation	CV	3-0-0-0	3	100
4.	20CED14	Computer Aided Engineering Drawing	ME	2-0-4-0	4	100
5.	20ELN15	Basic Electronics(IC)	EC	2-0-2-0	3	100
6.	20PHL16	Engineering Physics Lab	PHY	1-0-2-0	2	100
7.	20CSD17	Communication Skill Development-I	HSS	0-2-0-0	1	100
Total				14-4-8-0	20	700

First Semester – Chemistry Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	20MAT11	Calculus and Linear Algebra	MAT	3-2-0-0	4	100
2.	20CHE12	Engineering Chemistry(IC)	CHE	3-0-2-0	4	100
3.	20CCP13	Computer Concepts & C Programming	CS/IS	3-0-0-0	3	100
4.	20MEF14	Mechanical Engineering Foundation (IC)	ME	2-0-2-0	3	100
5.	20ELE15	Basic Electrical Engineering(IC)	EC	2-0-2-0	3	100
6.	20CPL16	Computer Programming Lab	CS/IS	1-0-2-0	2	100
7.	20CSD17	Communication Skill Development-I	HSS	0-2-0-0	1	100
Total				14-4-8-0	20	700

Second Semester – Physics Cycle

	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	20MAT21	Differential Equations & Statistical Methods	MAT	3-2-0-0	4	100
2.	20PHY22	Engineering Physics	PHY	3-0-0-0	3	100
3.	20CEF23	Civil Engineering Foundation	CV	3-0-0-0	3	100
4.	20CED24	Computer Aided Engineering Drawing	ME	2-0-4-0	4	100
5.	20ELN25	Basic Electronics(IC)	EC	2-0-2-0	3	100
6.	20PHL26	Engineering Physics Lab	PHY	1-0-2-0	2	100
7.	20CSD27	Communication Skill Development-II	HSS	0-2-0-0	1	100
Total				14-4-8-0	20	700

Second Semester – Chemistry Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	20MAT21	Differential Equations & Statistical Methods	MAT	3-2-0-0	4	100
2.	20CHE22	Engineering Chemistry(IC)	CHE	3-0-2-0	4	100
3.	20CCP23	Computer Concepts & C Programming	CS/IS	3-0-0-0	3	100
4.	20MEF24	Mechanical Engineering Foundation (IC)	ME	2-0-2-0	3	100
5.	20ELE25	Basic Electrical Engineering(IC)	EC	2-0-2-0	3	100
6.	20CPL26	Computer Programming Lab	CS/IS	1-0-2-0	2	100
7.	20CSD27	Communication Skill Development-II	HSS	0-2-0-0	1	100
Total				14-4-8-0	20	700

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG

Third Semester B.E.-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	19MAT31	Fourier series, Transforms and Numerical Techniques	Mathematics	3-2-0-0	4	100
2	19ECT32	Analog Electronic Circuits	EC	3-0-0-0	3	100
3	19ECI33	Digital Electronic Circuits(IC)	EC	3-0-2-0	4	100
4	19ECT34	Network Analysis	EC	2-2-0-0	3	100
5	19ECT35	Data Structure using C	CS/IS	3-0-0-0	3	100
6	19ECT36	Electronic Instrumentation	EC	3-0-0-0	3	100
7	19ECL37	Analog Electronics Circuits Lab	EC	1-0-2-0	2	100
8	19CPH38	Constitution of India and Professional Ethics and Human Rights	S&H	1-0-0-0	1	100
9	19ECH39	Elements of Communication	PT	0-0-4-0	2	100
TOTAL				19-4-8-0	25	900

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Fourth Semester B.E.-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	19MAT41	Complex Variable, Numerical Methods and Probability Distributions	Mathematics	3-2-0-0	4	100
2	19ECT42	Microprocessors and Microcontrollers	EC	3-0-0-0	3	100
3	19ECI43	Fundamentals of HDL (IC)	EC	3-0-2-0	4	100
4	19ECT44	Signals and Systems	EC	2-2-0-0	3	100
5	19ECT45	Engineering Electromagnetics	EC	2-2-0-0	3	100
6	19ECL46	Microprocessors and Microcontrollers LAB	EC	1-0-2-0	2	100
7	19ECT47	Universal Human Values	S&H	3-0-0-0	3	100
8	19KVK48/ 19KAK48	Vyavaharika/Adalitha Kannada	S&H	1-0-0-0	1	100
9	19ECH49	Professional Development of Engineers	PT	0-0-4-0	2	100
TOTAL				18-6-8-0	25	900

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Fifth Semester B.E.-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	18ECT51	Analog Communication	EC	3-2-0-0	4	100
2	18ECI52	Fundamentals of CMOS VLSI (IC)	EC	3-0-2-0	4	100
3	18ECT53	Information Theory and Coding	EC	2-2-0-0	3	100
4	18ECT54	Accountancy and Taxation	ECH	3-0-0-0	3	100
5	18ECT55X	Professional Elective-I	EC	3-0-0-0	3	100
6	18ECT56X	Professional Elective-II	CS/IS	3-0-0-0	3	100
7	18ECL57	Analog Communication LAB	EC	1-0-2-0	2	100
8	18ECH58	Environmental Studies	S&H	1-0-0-0	1	100
9	18ECH59	Employability Skills and Aptitude Development	PD	0-0-4-0	2	100
TOTAL				19-4-8-0	25	900

Professional Elective-I

Sl.No	Course Code	Course
1	18ECT551	Digital Switching Systems
2	18ECT552	Linear Integrated Circuits
3	18ECT553	Control Systems

Professional Elective-II

Sl.No	Course Code	Course
1	18ECT561	Object Oriented Programming using C++
2	18ECT562	Web Technology
3	18ECT563	JAVA Programming

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG

Sixth Semester B.E.-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	18ECT61	Digital Communication	EC	3-0-0-0	3	100
2	18ECT62	Digital Signal Processing	EC	2-2-0-0	3	100
3	18ECT63	Antennas and Wave Propagation	EC	3-0-0-0	3	100
4	18ECT64X	Professional Elective-III	EC	3-0-0-0	3	100
5	18ECT65X	Professional Elective-IV	EC	3-0-0-0	3	100
6	18ECT66X	Industrial Elective-I	EC	3-0-0-0	3	100
7	18ECL67	Digital Communication LAB	EC	1-0-2-0	2	100
8	18ECL68	Digital Signal Processing LAB	EC	1-0-2-0	2	100
9	18ECH69	Employability Skills and Aptitude Development	PD	1-0-4-0	3	100
TOTAL				20-2-8-0	25	900

Professional Elective-III

Sl.No	Course Code	Course
1	18ECT641	ARM Processors
2	18ECT642	Internet Of Things Technology
3	18ECT643	Nano-electronics

Professional Elective-IV

Sl.No	Course Code	Course
1	18ECT651	Artificial Neural Networks
2	18ECT652	Image Processing
3	18ECT653	Pattern Recognition

Industrial Elective-I

Sl.No	Course Code	Course
1	18ECT661	LabVIEW – Level 1
2	18ECT662	Robotic Process Automation
3	18ECT663	Wireless and Mobile Communication

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG

Seventh Semester B.E.-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	18ECT71	Embedded Systems	EC	3-2-0-0	4	100
2	18ECI72	Computer communication and Networks (IC)	EC	3-0-2-0	4	100
3	18ECT73X	Professional Elective-V /PBL	EC	3-0-0-0	3	100
4	18ECT74X	Professional Elective-VI	CS/IS	3-0-0-0	3	100
5	18ECT75X	Industrial Elective-II	EC	3-0-0-0	3	100
6	18ECL76	Embedded Systems LAB	EC	1-0-2-0	2	100
7	18ECP77	Project Phase-1	EC	0-0-2-0	1	100
TOTAL				16-2-6-0	20	700

Professional Elective-V / PBL

Sl.No	Course Code	Course
1	18ECT731	Satellite Communication
2	18ECT732	Artificial Intelligence & Machine Learning (AI&ML)
3	18ECT733	Fiber Optics and Networks

Professional Elective-VI

Sl.No	Course Code	Course
1	18ECT741	Operations Research
2	18ECT742	Data Analytics
3	18ECT743	Cloud Computing

Industrial Elective-II

Sl.No	Course Code	Course
1	18ECT751	LabVIEW – Level 2
2	18ECT752	Cryptography and Network Security
3	18ECT753	Industrial IOT using TI Microcontroller

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG

Eighth Semester B.E.-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	18ECP81	Project Phase II (Mid Term Evaluation)	EC	0-0-6-0	3	100
2	18ECP82	Project Phase III (Final Evaluation)	EC	0-0-8-0	4	100
3	18ECP83	Project Evaluation	EC	0-0-8-0	4	100
4	18ECP84	Technical Seminar	EC	0-0-0-4	1	100
5	18ECI85	Internship	EC	0-0-0-12	3	100
TOTAL				0-0-22-16	15	500

Department of Computer Science and Engineering
&
Department of Information Science and Engineering
2017 Batch CSE VII & VIII Semester

Seventh Semester B.E. – Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	17CSI71	Internet of Things (IoT) (IC)	CS	3-0-2-0	4	100
2	17CST72	Android Application Development	CS	2-0-0-0	2	100
3	17CSI73X	Foundation Elective-IX (IC)	CS	3-0-2-0	4	100
4	17CST74X	Engineering Elective-X /PBL	CS	3-0-0-0	3	100
5	17HOE75X	Open Elective-XI	CS/BS& H/ ME	2-0-0-4	3	100
6	17HOE76X	Open Elective-XII	CS/BS&H	2-0-0-4	3	100
7	17CSL77	Information and Network Security Laboratory	CS	1-0-2-0	2	100
8	17CSL78	Android Application Development Laboratory	CS	1-0-2-0	2	100
9	17CSP79	Project Phase-I and Seminar	CS	0-0-6-0	3	100
	Total			17-0-14-8	26	900

Foundation Elective - IX (IC)

Sl. No.	Course Code	Course Name
1	17CSI731	Object Oriented Modeling and Designing
2	17CSI732	Big Data
3	17CSI733	Web Technologies – Servlet, JSP

Engineering Elective - X / PBL

Sl. No.	Course Code	Course Name
1	17CST741	System Modeling and Simulation
2	17CST742	C# and .Net (MOOCS)
3	17CST743	Managing Big Data with MySQL (Certificate Course), Duke University

Open Elective - XI

Sl. No.	Course Code	Course Name
1	17HOE751	Tax Management
2	17HOE752	Assessment of Building Energy Performance (offered by ASHRAE)
3	17HOE753	National Disaster Management and Mitigation
4	17HOE754	Certification Course (Online)

ACM # 07

Open Elective - XII

Sl. No.	Course Code	Course Name
1	17HOE761	Small & Medium Enterprise Management
2	17HOE762	Occupational Safety and Health Administration
3	17HOE763	Animation and Multimedia Engineering
4	17HOE764	Certification Course (Online)

Fifth Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept	L-T-P-S (Hrs/Week)	Total Credits	Marks
1.	18CSI51	Database Concepts	CSE/ISE	3:0:2:0	4	100
2.	18CSI52	Advanced JAVA	CSE/ISE	3:0:2:0	4	100
3.	18CST53	Operating Systems	CSE/ISE	3:1:0:0	3	100
4.	18CST54	Software Engineering	CSE/ISE	3:1:0:0	3	100
5.	18CSI55X	Foundation Elective-IV	CSE/ISE	3:0:2:0	4	100
6.	18EET56X	Engineering Elective-V	CSE/ISE	3:1:0:0	3	100
7.	18CSL57	Operating Systems Laboratory	CSE/ISE	1:0:2:0	2	100
8.	18CSH58	Environmental Science	CSE/ISE	1:0:0:0	1	100
Total				20:3:8:0	24	800

Foundation Elective- IV (IC)

Sl. No.	Course Code	Course Name
1	18CSI551	Introduction to Microcontrollers & Microprocessors
2	18CSI552	Artificial Intelligence
3	18CSI553	PHP Programming

Engineering Elective –V

Sl. No.	Course Code	Course Name
1	18EET561	Information Retrieval
2	18EET562	Digital Switching Systems
3	18EET563	Green Buildings
4	18EET564	Project Based Learning/Mini Projects

Sixth Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept	L:T:P-S (Hrs/Week)	Total Credits	Marks
1.	18CST61	Python Programming	CSE/ISE	3:1:0:0	3	100
2.	18CSI62	Computer Networks	CSE/ISE	3:0:2:0	4	100
3.	18CSI63	Android Application Development	CSE/ISE	3:0:2:0	4	100
4.	18CSI64X	Foundation Elective-VI	CSE/ISE	3:0:2:0	4	100
5.	18EET65X	Engineering Elective-VII	CSE/ISE	3:1:0:0	3	100
6.	18HOE66X	Open Elective –VIII	CSE/ISE	3:0:0:0	3	100
7.	18CSL67	Python Programming Laboratory	CSE/ISE	1:0:2:0	2	100
8.	18CSH68	Humanities	CSE/ISE			100
Total					23	800

Seventh Semester B.E. – Scheme

Sl. No.	Course Code	Course Name
1	18CSI641	Advanced Cloud Computing
2	18CSI642	Introduction to Block Chain
3	18CSI643	Information & Network Security

Engineering Elective -VI

Sl. No.	Course Code	Course Name
1	18EET651	Image Processing
2	18EET652	Nano-electronics
3	18EET653	Water Resources Engineering
4	18EET654	Project Based Learning/certification(NPTEL,IITs etc)

Open Elective -VIII

1	18HOE661	Technical Certification+ Seminar
2	18HOE662	Robotic Process Automation
3	18HOE663	Yoga and Meditation

ACM # 07

Seventh Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept	L-T-P-S (Hrs/Week)	Total Credits	Marks
1.	18CST71	Big Data Analytics	CSE/ISE	3-0-0-0	3	100
2.	18CST72	Machine Learning	CSE/ISE	1-0-2-0	3	100
3.	18CST73	Internship	CSE/ISE	0-0-3-0	3	100
4.	18CSI74X	Foundation Elective-IX	CSE/ISE	3:0:2:0	4	100
5.	18EET75X	Engineering Elective-X	CSE/ISE	3:0:0:0	3	100
6.	18HOE76X	Open Elective –XI	CSE/ISE	1:0:0:2	2	100
7.	18CSL77	Machine Learning Laboratory	CSE/ISE	1:0:2:0	2	100
8.	18CSP78	Project Phase 1 & Seminar	CSE/ISE	0:0:6:0	3	100
Total					23	800

Foundation Elective- IX (IC)

Sl. No.	Course Code	Course Name
1	18CSI741	Devops
2	18CSI742	Simulation & Modeling
3	18CSI743	AWS

Engineering Elective -X

Sl. No.	Course Code	Course Name
1	18EET751	UML& AGILE PRACTICES
2	18EET752	Wireless Communication
3	18EET753	Fire safety and management

Open Elective-XI

Sl. No.	Course Code	Course Name
1	18HOE781	Technical Certification
2	18HOE782	Tax Management
3	18HOE783	Natural disaster mitigation and management

Eighth Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept	Total Credits	Marks
1.	18CSP81	Technical Seminar	CSE/ISE	2	100
2.	18CSP82	Project Phase-II	CSE/ISE	3	100
3.	18CSP83	Project Phase-III	CSE/ISE	3	100
4.	18CSP84	Evaluation and Viva voce (External)	CSE/ISE	6	100
Total				14	400

II to VIII Semesters

Scheme

Third Semester B.E. – Scheme

SL. No	Course Code	Course Name	Total Credits	L:T:P:S (Hrs/Week)	Online	Offline	Marks	Weekly load
1	19CSM31	Integral Transforms & Applications	3	2 : 2 : 0 : 0	-	100%	100	0+4
2	19CSI32	Data Structures using C(IC)	4	2 : 0 : 4 : 0		100%	100	0+8
3	19CSI33	Web Programming (IC)	3	2 : 0 : 4 : 0		100%	100	0+6
4	19CSI34	Python Programming (IC)	4	2 : 0 : 4 : 0		100%	100	0+8
5	19CST35	Analog and Digital Electronics	3	2 : 2 : 0 : 0	20%	80%	100	1+2
6	19CST36	Computer Organization & Architecture	3	2 : 2 : 0 : 0	80%	20%	100	2+1
7	19CPH37	Constitution of India and Professional Ethics and Human Rights	1	0 : 2 : 0 : 0	100%	-	100	1+0
8	19KAK38	Kannada	1	0 : 2 : 0 : 0	100%		100	1+0
9		Placement Training-I	2	1 : 0 : 2 : 0	-	100%	100	0+2
Total			24	13: 10:14:0			900	5+31

Fourth Semester B.E. – Scheme

SL. No	Course Code	Course Name	Total Credits	L:T:P:S (Hrs/Week)	Online	Offline	Marks	Weekly load
1	19CSM41	Statistics and Probability	3	2 : 2 : 0 : 0	-	100%	100	0+4
2	19CSI42	Design and Analysis of Algorithms (IC)	4	2 : 0 : 4 : 0	-	100%	100	0+8
3	19CSI43	Object Oriented Programming with Java (IC)	4	2 : 0 : 4 : 0		100%	100	0+8
4	19CSI44	Database Concepts through MySQL (IC)	3	2 : 0 : 2 : 0		100%	100	0+6
5	19CST45	Operating Systems	3	2 : 2 : 0 : 0	70%	30%	100	2+1
6	19CST46	Introduction to Microprocessors & Microcontrollers	3	2 : 2 : 0 : 0	30%	70%	100	1+2
7	19UHV47	Universal Human Values- 2	3	3 : 0 : 0 : 0	100%		100	2+0
8		Placement Training-II	2	1 : 0 : 2 : 0		100%	100	0+2
		Total	**25**	**16 :6 :12 : 0**			**800**	**5+31**

Note: Internship has to be completed compulsorily before VIII Semester

Fifth Semester B.E. – Scheme

SL. No	Course Code	Course Name	Total Credits	L:T:P:S (Hrs/Week)	Online	Offline	Marks	Weekly load
1	19CST51	Software Engineering	3	3 : 0 : 0 : 0	70%	30%	100	2+1
2	19CSI52	Advanced Java	4	2 : 0 : 4 : 0		100%	100	0+8
3	19CST53	Computer Networks	4	2 : 0 : 4 : 0	25%	75%	100	2+6
4	19CSI54	Data Warehousing & Data Mining	3	3 : 0 : 0 : 0		100%	100	0+4
5	19CST55X	Professional Elective-I	3	3 : 0 : 0 : 0		100%	100	0+4
6	19CSH56	Accountancy and Taxation	3	3 : 0 : 0 : 0		100%	100	0+3
7	19EVN57	Environmental Science	1	0 : 2 : 0 : 0	100%		100	1+0
8	19CSP58	Mini Project	2	0 : 0 : 0 : 8		100%	100	0+1
9		Placement Training-III	2	1 : 0 : 2 : 0		100%	100	0+4
		Total	**25**	**17 :2 :10 :8**			**900**	**5+31**

Note: Internship has to be completed compulsorily before VIII Semester

Professional Elective

SL. No.	Course Code	Course Name	Total Credits	Marks
1	19CST551	Artificial Intelligence	3	100
2	19CST552	Image Processing	3	100
3	19CST553	Soft Computing	3	100

Sixth Semester B.E. – Scheme

SL. No	Course Code	Course Name	Total Credits	L:T:P:S (Hrs/Week)	Online	Offline	Marks	Weekly load
1	19CSI61	Cloud Computing (IC)	4	2 : 0 : 4 : 0		100%	100	0+6
2	19CSI62	Android Application Development(IC)	4	2 : 0 : 4 : 0		100%	100	0+6
3	19CST63	Big Data Analytics	3	3 : 0 : 0 : 0	50%	50%	100	2+2
4	19CSI64	Angular & React JavaScript	3	3 : 0 : 0 : 0		100%	100	0+4
5	19CST65X	Professional Elective -II	3	3 : 0 : 0 : 0	50%	50%	100	2+2
6	19CST66X	Professional Elective –III	3	3 : 0 : 0 : 0	10%	90%	100	1+5
8		Placement Training-IV	3	2 : 0 : 2 : 0		100%	100	0+6
		Total	23	18: 0: 10: 0			700	5+31

Note: Internship has to be completed compulsorily before VIII Semester

Professional Elective

SL. No.	Course Code	Course Name	Total Credits	Marks
1	19CST651	Cyber Security and Ethical Hacking	3	100
2	19CST652	Information & Network Security	3	100
3	19CST653	Block Chain & Crypto Currencies	3	100

Professional Elective

SL. No	Course Code	Course Name	Total Credits	Marks
1	19CST661	Animation & Game Development	3	100
2	19CST662	Devops	3	100
3	19CST663	Machine Learning	3	100

Seventh Semester B.E. – Scheme

SL. No	Course Code	Course Name	Total Credits	L:T:P:S (Hrs/Week)	Online	Offline	Marks	Weekly Load
1	19CST71X	Professional Elective -IV	3	3 : 0 : 0 : 0	30%	70%	100	1+2
2	19CST72X	Professional Elective –V	3	3 : 0 : 0 : 0	100%	-	100	3+0
3	19CST73X	Professional Elective -VI	3	3 : 0 : 0 : 0	30%	70%	100	1+2
4	19CST74X	Industrial Elective-I	3	3 : 0 : 0 : 0	100%	-	100	3+0
5	19CST75X	Industrial Elective-II	3	3 : 0 : 0 : 0		100%	100	0+3
6	19CST76	Technical Seminar	2	0 : 0 : 0 : 8		100%	100	0+1
7	19CSP77	Project Seminar Presentation-I	1	0 : 0 : 2 : 0			100	0+0
		Total	**18**	**15: 0: 2: 8**			**700**	**8+8**

Note: Internship has to be completed compulsorily before VIII Semester

Professional Elective

SL. No	Course Code	Course Name	Total Credits	Marks
1	19CST711	UML& AGILE PRACTICES	3	100
2	19CST712	Internet of Things	3	100
3	19CST713	AWS	3	100

Professional Elective

SL. No.	Course Code	Course Name	Total Credits	Marks
1	19CST721	Storage Area Network	3	100
2	19CST722	Adhoc Network	3	100
3	19CST723	Management Information System(MIS)	3	100

Professional Elective

SL. No.	Course Code	Course Name	Total Credits	Marks
1	19CST731	Robotics	3	100
2	19CST732	Advanced Algorithms	3	100
3	19CSI733	Pattern Recognition and Anomaly Detection	3	100

Industrial Elective

SL. No.	Course Code	Course Name	Total Credits	Marks
1	19CST741	Decision Support Systems(DSS)	3	100
2	19CST742	Enterprise Resource Planning(ERP)	3	100
3	19CST743	Supply Chain Management	3	100

Industrial Elective

SL. No.	Course Code	Course Name	Total Credits	Online
1	19CST751	Digital Marketing	3	100%
2	19CST752	Operation Research	3	-
3	19CST753	Management Entrepreneurship	3	100%

Eighth Semester BE – Scheme

SL. No.	Course Code	Course Name	Total Credits	Marks
1	19CSP81	Internship	3	100
2	19CSP82	Project Phase-I	3	100
3	19CSP83	Project Phase-II	3	100
4	19CSP84	Project Phase-III	3	100
5	19CSP85	Evaluation and Viva voce (External)	6	100
Total			18	500

2019 - SCHEME - Department of Mechanical Engineering (I to VIII Semester)

First Semester – Physics Cycle

Sl.No.	Course Code	Course Name	Teaching Dept.	Credits	L:T:P:S (Hrs/week)	Marks
1	19MAT11	Calculus and Linear Algebra	MAT	4	3:2:0:0	100
2	19PHY12	Engineering Physics	PHY	3	3:0:0:0	100
3	19CEF13	Civil Engineering Foundation	CV	3	3:0:0:0	100
4	19CED14	Computer Aided Engineering Drawing	ME	4	2:0:4:0	100
5	19ELN15	Basic Electronics (IC)	EC	3	2:0:2:0	100
6	19PHL16	Engineering Physics Laboratory	PHY	2	1:0:2:0	100
7	19CSD17	Communication Skill Development - I	HSS	1	0:2:0:0	100
Total				**20**	**14:4:8:0**	**700**

Second Semester – Chemistry Cycle

Sl.No.	Course Code	Course Name	Teaching Dept.	Credits	L:T:P:S (Hrs/week)	Marks
1	19MAT21	Differential Equations and Statistical Methods	MAT	4	3:2:0:0	100
2	19CHE22	Engineering Chemistry (IC)	CHE	4	3:0:2:0	100
3	19CCP23	Computer Concepts and C Programming	CS/IS	3	3:0:0:0	100
4	19MEF24	Mechanical Engineering Foundation (IC)	ME	3	2:0:2:0	100
5	19ELE25	Basic Electrical Engineering (IC)	EC	3	2:0:2:0	100
6	19CPL26	Computer Programming Laboratory	CS/IS	2	1:0:2:0	100
7	19CSD27	Communication Skill Development-II	HSS	1	0:2:0:0	100
Total				**20**	**14:4:8:0**	**700**

IC – Integrated Course L – Lecture T-Tutorials P-Practical S – Self Study

Third Semester

Sl.No.	Course Code	Course Name	Teaching Dept.	Credits	L:T:P:S (Hrs/week)	Marks
1	19MAT31	Fourier Series, Transforms and Numerical Techniques	BSC	4	3:2:0:0	100
2	19MET32	Measurements and Manufacturing Process	ME	3	3:0:0:0	100
3	19MET33	Mechanics of Materials	ME	4	4:0:0:0	100
4	19MET34	Computer Aided Machine Drawing	ME	3	2:0:2:0	100
5	19MET35X	**Professional Elective - I**	ME	3	3:0:0:0	100
6	19MEL36	Material Testing Laboratory	ME	2	1:0:2:0	100
7	19MEH37	Universal Human Values	HSMC	3	3:0:0:0	100
8	19MEH38	Constitution of India, Professional Ethics and Human Rights	HSMC	1	2:0:0:0	100
9	19MEH39	Elements of Communication	PT	2	0:0:4:0	100
Total				**25**		

Sl. No.	Course Code	Course Name		Credits	Marks
1	19MET551	Composites Material Technology		3	100
2	19MET552	Power Plant Engineering		3	100
3	19MET553	Turbo-machines		3	100

Professional Elective - V

Sl. No.	Course Code	Course Name		Credits	Marks
1	19MET561	Metal Forming Process		3	100
2	19MET562	Mechatronics		3	100
3	19MET563	Basics of Python for Mechanical Engineers		3	100

Sixth Semester

Sl.No.	Course Code	Course Name	Teaching Dept.	Credits	L:T:P:S (Hrs/week)	Marks
1	19MET61	Finite Element Methods	ME	3	3:0:0:0	100
2	19MET62	Computer Integrated Manufacturing	ME	3	3:0:0:0	100
3	19MET63	Heat and Mass Transfer	ME	4	3:2:0:0	100
4	19MET64X	**Professional Elective VI**	ME	3	3:0:0:0	100
5	19MET65X	**Industrial Elective I**	ME	3	3:0:0:0	100
6	19MET66X	**Industrial Elective II**	ME	3	3:0:0:0	100
7	19MEL67	Computer Integrated Manufacturing Laboratory	ME	2	1:0:2:0	100
8	19MEL68	Heat & Mass Transfer Laboratory	ME	2	1:0:2:0	100
9	19MEH69	Employability Skills and Technical Aptitude	HSMC	2	0:0:4:0	100
Total				**25**		

Professional Elective -VI

Sl. No.	Course Code	Course Name		Credits	Marks
1	19MET641	Design of Transmission Elements		3	100
2	19MET642	Refrigeration and Air Conditioning		3	100
3	19MET643	Lab View for Industrial Automation		3	100

Industrial Elective - I

Sl. No.	Course Code	Course Name		Credits	Marks
1	19MET651	Non-Destructive Testing		3	100
2	19MET652	Operations Research		3	100
3	19MET653	Industrial Internet of Things		3	100

Industrial Elective - II

Sl. No.	Course Code	Course Name		Credits	Marks
1	19MET661	Hydraulic and Pneumatic Systems		3	100
2	19MET662	Design of Jigs and Fixture		3	100
3	19MET663	Software Testing		3	100

Seventh Semester

Sl.No.	Course Code	Course Name	Teaching Dept.	Credits	L:T:P:S (Hrs/week)	Marks
1	19MET71	Management & Entrepreneurship	ME	3	3:0:0:0	100
2	19MET72	Mechanical Vibrations and Noise	ME	3	2:2:0:0	100
3	19MET73X	**Professional Elective VII**	ME	3	3:0:0:0	100
4	19MET74X	**Professional Elective VIII**	ME	3	3:0:0:0	100
5	19MET75X	**Industrial Elective III**	ME	3	3:0:0:0	

6	19MEL76	Computer Aided Modelling and Analysis Laboratory	ME	2	1:0:2:0
7	19MEL77	Design Laboratory	ME	2	1:0:2:0
8	19MEP78	Project Phase - I	ME	1	0:2:0:0
Total				**20**	

Professional Elective -VII

Sl. No.	Course Code	Course Name	Credits	Marks
1	19MET731	Small and Medium Enterprises	3	100
2	19MET732	Accountancy and Taxation	3	100
3	19MET733	Assessment of Building Energy Performance	3	100

Professional Elective - VIII

1	19MET741	Finite Element Analysis by using Hyper Mesh	3	100
2	19MET742	Biomass Energy Systems	3	100
3	19MET743	Automotive Electronics	3	100

Industrial Elective - III

1	19MET751	Machine Learning for Mechanical Engineers	3	100
2	19MET752	Welding Technology	3	100
3	19MET753	Solar Energy	3	100

Eighth Semester

Sl.No.	Course Code	Course Name	Teaching Dept.	Credits	L:T:P:S (Hrs/week)	Marks
1	19MET81	Operations Management	ME	3	3:0:0:0	100
2	19MEP82	Internship	ME	3		100
3	19MEP83	Technical Seminar	ME	1	0:2:0:0	100
4	19MEP84	Project Work	ME	8		100
Total				**15**		
Grand Total				**175**		

2019 - SCHEME - Department of Civil Engineering
Third Semester B.E. – CV Scheme

Sl. No.	Course Code		Course Name	Teaching Dept.	Total Credits	L:T:P:S	Marks	Weekly Load
1	BSC	19CVM31	Integral Transforms And Fourier Series	BS	4	3-2-0-0	100	0+5
2	PCC	19CVT32	Strength of Materials	CE	3	3-2-0-0	100	0+5
3	PCC	19CVT33	Fluids Mechanics and Machinery	CE	3	3-2-0-0	100	0+5
4	PCC	19CVT34	Construction Materials, Stores and Inventory Control	CE	3	3-0-0-0	100	0+5
5	PCC	19CVT35	Engineering Surveying	CE	3	2-2-0-0	100	0+4
6	PCC	19CVT36	Engineering Geology	CE	3	3-0-0-0	100	0+3
7	PCC	19CVL37	Building Material Testing Laboratory	CE	2	1-0-2-0	100	0+2
8	HSMC	19CVH38	Universal Human Values	S&H	3	2-0-2-0	100	2+0
9	HSMC	19CVH39	Constitution of India and Professional Ethics	S&H	1	1-0-0-0	100	1+0
	TOTAL				25	21:8:6:0	900	3+29

Fourth Semester B.E. – CV Scheme

Sl. No.	Course Code		Course Name	Teaching Dept.	Total Credits	L:T:P:S	Marks	Weekly load
1	BSC	19CVM41	Applied Calculus and Probability Distributions	BS	4	3-2-0-0	100	0+5
2	PCC	19CVT42	Structural Analysis-I	CE	4	3-2-0-0	100	0+5
3	PCC	19CVT43	Advanced Construction Techniques	CE	3	2-2-0-0	100	0+4
4	PCC	19CVT44	Irrigation and Hydraulic Structures	CE	3	3-0-0-0	100	0+4
5	PCC	19CVT45	Geotechnical Engineering	CE	3	3-0-0-0	100	0+5
6	PCC	19CVT46	Environmental Engineering	CE	3	3-0-0-0	100	2+1
7	PCC	19CVL47	Surveying Practice	CE	2	1-0-2-0	100	0+3
8	PCC	19CVL48	Fluids Mechanics and Machinery Lab	CE	2	1-0-2-0	100	0+2
9	HSMC	19CVH49	Aadalitha Kannada and Vyavaharika Kannada	S&H	1	1-0-0-0	100	1+0
	TOTAL				25	20:6:4:0	900	3+29

Internship is to be completed before VII Semester

Fifth Semester B.E. – CV Scheme

Sl. No	Course Code		Course Name	Teaching Dept.	Total Credits	L-T-P:S	Marks	Weekly Load
1	PCC	19CVT51	Design and Drawing of RCC Structures	CE	4	3-2-0-0	100	0+5
2	PCC	19CVT52	Structural Analysis-II	CE	3	2-2-0-0	100	0+5
3	PCC	19CVT53	Highway Engineering and Construction	CE	3	2-2-0-0	100	0+4
4	PEC	19CVT54	Construction Quality Management System (QA/QC)	CE	3	3-0-0-0	100	0+5
5	PCC	19CVT55	Foundation Engineering	CE	3	2-2-0-0	100	0+4
6	PEC	19CVT56X	Professional Elective – I	CE	3	3-0-0-0	100	0+3
7	PCC	19CVL57	Environmental Engineering Lab	CE	2	1-0-2-0	100	0+2
8	HSMC	19CVH58	Construction Management and Entrepreneurship	CE	3	3-0-0-0	100	2+1
9	HSMC	19CVH59	Environmental Studies	CE	1	1-0-0-0	100	1+0
Total					25	20:8:2:0	900	3+29

Internship is to be completed before VII Semester

Professional Elective – I		
Sl. No	Course Code	Course
1	19 CVT 561	Basics of Structural Dynamics and Earthquake Resistant Design
2	19 CVT 562	Air pollution controlling and monitoring
3	19 CVT 563	Design of Masonry Structures

Sixth Semester B.E. – CV Scheme

Sl. No	Course Code		Course	Teaching Dept.	Total Credits	L-T-P:S	Marks	Weekly Load
1	PCC	19CVT61	Design of Steel Structures	CE	4	3-2-0-0	100	0+5
2	PCC	19CVT62	Estimation and Quantity Surveying in Construction (QS)	CE	3	2-2-0-0	100	0+4
3	PCC	19CVT63	Construction planning Techniques (IC)	CE	4	3-2-0-0	100	0+6
4	PEC	19CVT64X	Professional Elective –II	CE	3	3-0-0-0	100	1+4
5	PEC	19CVT65X	Professional Elective –III	CE	3	3-0-0-0	100	1+4
6	MEP	19CVT66X	Industrial Elective-I	CE	3	3-0-0-0	100	1+4
7	PCC	19CVL67	Concrete and Highway Engineering Lab	CE	2	1-0-2-0	100	0+2
8	PCC	19CVP68	Extensive Survey project	CE	2	1-0-2-0	100	
9	P & T	19CVPT60	Placement Training	PT	1	1-0-0-0	100	0+2
Total					25	20:6:4:0	900	3+31

Internship is to be completed before VII Semester

Professional Elective –II

Sl. No	Course Code	Course
1	19 CVT 641	Traffic Engineering and Management
2	19 CVT 642	Remote sensing and GIS
3	19 CVT 643	Sub Surface Exploration and Ground Improvement Techniques

Professional Elective –III

Sl. No	Course Code	Course
1	19 CVT 651	Repair and Rehabilitation of Concrete structures
2	19 CVT 652	Advanced design of temporary structure
3	19 CVT 653	Solid waste Management

Industrial Elective – I

Sl. No	Courses Code	Course Name
1	19 CVT 661	Construction joints and water proofing
2	19 CVT 662	Construction Safety and industrial policies
3	19 CVT 663	Natural Disaster Mitigation and Management

Seventh Semester B E CV Scheme

Sl. No	Subject Code		Subject	Teaching Dept.	L-T-P-S	Total Credits	Marks	Weekly load
1	PCC	19 CVT71	Bridge Engineering	CE	2-2-0-0	3	100	1+5
2	PCC	19 CVT72	Pre Stressed Concrete Structures	CE	2-2-0-0	3	100	0+5
3	PEC	19CVT73X	Professional Elective – IV	CE	3-0-0-0	3	100	1+3
4	MEP	19 CVT74X	Industrial Electives- II	CE	3-0-0-0	3	100	0+5
5	MEP	19 CVT75X	Industrial Electives- III	CE	3-0-0-0	3	100	1+3
6	PCC	19 CVL76	Geotechnical Engineering Lab	CE	1-0-2-0	2	100	0+2
7	PCC	19 CVL77	Software Application Lab	CE	0-0-2-0	2	100	0+4
8	PCC	19CVP78	Project Phase -I	CE	0-0-0-2	1	100	0+2
9	Placement Drive (NCET, Job Mela)			CE				
Total					14:4:4:2	20	800	3+29

Professional Elective - IV		
Sl. No	Courses Code	Course
1	19 CVT 731	Railways, Harbor, Airport and Tunnel Engineering
2	19 CVT 732	Advanced Concrete Technology
3	19 CVT 733	Energy efficient and Green Buildings

Industrial Elective - II		
Sl. No	Courses Code	Course
1	19CVT 741	Analysis and Design of Tall Structures
2	19 CVT 742	Computational Structural Mechanics
3	19 CVT 743	Advanced Design of Steel Structures

Industrial Elective - III		
Sl. No	Courses Code	Course
1	19 CVT751	Alternative Building Materials And Technologies
2	19 CVT 752	Industrial wastewater treatment
3	19 CVT 753	Rural water supply and sanitation

Eighth Semester B E CV Scheme

S. No.	Course Code	Course Name	Total Credits	Marks
1.	19CVP81	Internship	3	100
2.	19CVP82	Project Phase-II	3	100
3.	19CVP83	Project Phase-III	4	100
4.	19CVP84	Project Evaluation and Viva voce (External)	4	100
5.	19CVP85	Technical Seminar	1	100
		AICTE Activity points (Mandatory)		
Total			15	500

Department of Master of Business Administration
SCHEME OF STUDY - THIRD SEMESTER MBA

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	19 MBA 31	Entrepreneurial Development	4	58	Core	4-0-0-0	MBA
2	19 MBA XXX AA	1st Specialization Elective 1	3	61	Core	3-0-0-0	MBA
3	19 MBA XXX BB	1st Specialization Elective 2	3	64	Core	3-0-0-0	MBA
4	19 MBA XXX CC	1st Specialization Elective 3	3	67	Core	3-0-0-0	MBA
5	19 MBA YYY AA	2nd Specialization Elective 1	3	70	Core	3-0-0-0	MBA
6	19 MBA YYY BB	2nd Specialization Elective 2	3	73	Core	3-0-0-0	MBA
7	19 MBA YYY CC	2nd Specialization Elective 3	3	76	Core	3-0-0-0	MBA

SCHEME OF STUDY – FOURTH SEMESTER MBA

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	19 MBA 41	Project Work	12	88	Perspective	0-0-0-12	MBA
2	19 MBA XXX DD	1st Specialization Elective 4	3	91	Core	3-0-0-0	MBA
3	19 MBA YYY EE	1st Specialization Elective 5	3	94	Core	3-0-0-0	MBA
4	19 MBA YYY DD	2nd Specialization Elective 4 (Analytical Course)	3	97	Core	3-0-0-0	MBA
5	19 MBA XXX EE	2nd Specialization Elective 5	3	100	Core	3-0-0-0	MBA

SCHEME OF STUDY - FIRST SEMESTER MBA

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 11	Economics for Business Decisions	4	4	Core	4-0-0-0	MBA
2	20 MBA 12	Management and Organizational Behaviour	4	8	Core	4-0-0-0	MBA
3	20 MBA 13	Marketing Management	4	12	Foundation for specialization	4-0-0-0	MBA
4	20 MBA 14	Accounting for Business Decisions	4	16	Core	4-0-0-0	MBA
5	20 MBA 15	Business Regulations	4	20	Core	4-0-0-0	MBA
6	20 MBA 16	Statistical Tools for Business Research	4	24	Core	4-0-0-0	MBA
7	20 MBA 17	Seminar 1	2	26	Skill Development	0-0-0-2	MBA

SKILL DEVELOPMENT (Zero Credit Course)

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 01	Bridge Course (Course Curriculum Designed for Finance and Non Finance Based Back ground)	0	0	Foundation for MBA Course	4-0-0-0	MBA
2	20 MBA 02	Campus to Corporate Level 1	0	0	Skill Development	4-0-0-0	MBA
3	20 MBA 03	Advance Excel	0	0	Skill Development	4-0-0-0	MBA

SCHEME OF STUDY –SECOND SEMESTER MBA

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 21	Human Resource Management	4	30	Foundation for specialization	4-0-0-0	MBA
2	20 MBA 22	Financial Management	4	34	Foundation for specialization	4-0-0-0	MBA
3	20 MBA 23	Entrepreneurial Development	4	38	Core	4-0-0-0	MBA
4	20 MBA 24	Operation Research	4	42	Foundation for specialization	4-0-0-0	MBA
5	20 MBA 25	Business Research Methods	4	46	Core	4-0-0-0	MBA
6	20 MBA 26	Strategic Management	4	50	Core	4-0-0-0	MBA
7	20 MBA 26	Seminar 2	2	52	Skill Development	0-0-0-2	MBA

Skill Development (Zero Credit Course)

Sl No	Course Code	Name of the Course	Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 04	Fundamentals of Data Analytics	4	Skill Development	4-0-0-0	MBA
2	20 MBA 05	Campus to Corporate level 2	4	Skill Development	4-0-0-0	MBA
3	20 MBA 06	International Language (Non credit based intervention)	4	Skill Development	2-0-0-0	MBA

SCHEME OF STUDY - THIRD SEMESTER MBA

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 31	Organizational Study (Industry Integration/Study in NGO During their vacation of second semester)	4	56	Perspective	0-0-0-6	MBA
2	20 MBA 32	Seminar 3	2	58	Skill Development	0-0-0-2	MBA
3	20 MBA XXX AA	1st Specialization Elective 1	3	61	Core	3-0-0-0	MBA
4	20 MBA XXX BB	1st Specialization Elective 2	3	64	Core	3-0-0-0	MBA
5	20 MBA XXX CC	1st Specialization Elective 3	3	67	Core	3-0-0-0	MBA
6	20 MBA YYY AA	2nd Specialization Elective 1	3	70	Core	3-0-0-0	MBA
7	20 MBA YYY BB	2nd Specialization Elective 2	3	73	Core	3-0-0-0	MBA
8	20 MBA YYY CC	2nd Specialization Elective 3	3	76	Core	3-0-0-0	MBA

Kind Note

Internships: This course is a practical intervention where the students will be working with the Organization/NGO during their semester gap between 2nd and 3rd semester. The duration of the study would be one month and the students has to submit the report of the study.

Skill Development (Zero Credit Course)

Sl No	Course Code	Name of the Course	Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 07	Campus to corporate level 3	0	Skill Development	4-0-0-0	MBA
2	20 MBA 08	Certificate Course (Industry Integration based on 1st and 2nd Specializations)	0	Skill Development (Industry integrated)	4-0-0-0	MBA

SCHEME OF STUDY – FOURTH SEMESTER MBA

Sl No	Course Code	Name of the Course	Course Credit	Cumulative Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 41	Project Work	12	88	Perspective	0-0-0-12	MBA
2	20 MBA XXX DD	1st Specialization Elective 4	3	91	Core	3-0-0-0	MBA
3	20 MBA YYY EE	1st Specialization Elective 5	3	94	Core	3-0-0-0	MBA
4	20 MBA YYY DD	2nd Specialization Elective 4	3	97	Core	3-0-0-0	MBA
5	20 MBA XXX EE	2nd Specialization Elective 5	3		Core	3-0-0-0	MBA

Skill Development (Zero Credit Course)

Sl No	Course Code	Name of the Course	Course Credit	Nature of the Course	LTPS Hours per Week	Teaching Department
1	20 MBA 09	Campus to Corporate level 4	0	Skill Development	4-0-0-0	MBA
2	20 MBA 10	Certificate Course (Industry Integration based on 3rd and 4th Specializations)	0	Skill Development	4-0-0-0	MBA

PKL

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Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

First Semester M.Tech- Structural Engineering Scheme

Sl. No	Subject Code	Subject	Teaching Department	L:T:P (Hrs/week)	Total Credits	Marks
1.	20CSE11	Advanced Design of RC Structures	CV	4-0-0	4	100
2.	20CSE12	Design of Precast & Composite Structures	CV	4-0-0	4	100
3.	20CSE13	Computational Structural Mechanics	CV	4-0-0	4	100
4.	20CSE14	Structural Dynamics	CV	4-0-0	4	100
5.	20CSE15X	**Elective- I**	CV	3-0-0	3	100
6.	20CSE16	Structural Engineering Lab – I	CV	0-0-2	2	100
7.	20CSE17	Research Methodology & IPR	CV	2-0-0	2	100
Total				**21-0-2**	**23**	**700**

Elective- I		
1	20CSE151	Advanced Design of Pre-stressed Concrete Structures
2	20CSE152	Mechanics of Deformable Bodies
3	20CSE153	Repair and Rehabilitation of Structures

Second Semester M.Tech –Structural Engineering Scheme

Sl. No	Subject Code	Subject	Teaching Department	L:T:P (Hrs/week)	Total Credits	Marks
1.	20CSE21	Advanced Design of Steel Structures	CV	4-0-0	4	100
2.	20CSE22	Earthquake Resistant Design of Structures	CV	4-0-0	4	100
3.	20CSE23	Finite Element Methods and Analysis	CV	4-0-0	4	100
4.	20CSE24x	**Elective – II**	CV	4-0-0	4	100
5.	20CSE25x	**Elective – III**	CV	4-0-0	4	100
6.	20CSE26	Structural Engineering Lab – II	CV	0-0-2	2	100
7.	20CSE27	Seminar - I	CV	0-0-2	1	50
Total				**20-0-4**	**23**	**650**

Elective – II		
1.	20CSE241	Advanced Structural Analysis
2.	20CSE242	Design of RC Bridges
3.	20CSE243	Optimization of Structures

Elective – III		
1.	20CSE251	Design of Tall Structures
2.	20CSE252	Structural Health Monitoring
3.	20CSE253	Reliability analysis of Structures

Third Semester M.Tech – Structural Engineering Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L:T:P (Hrs/week)	Total Credits	Marks
1.	20CSE31	Stability of Structures	CV	4-0-0	4	100
2.	20CSE32x	**Elective – IV**	CV	4-0-0	4	100
3.	20CSE33x	**Elective – V**	CV	4-0-0	4	100
4.	20CSE34	Dissertation Phase – I	CV	0-0-20	10	100
5.	20CSE35	Internship/Term paper/Mini project	CV	0-0-4	3	100
6.	20CSE36	Seminar-II	CV	0-0-4	1	50
Total				**12-0-28**	**26**	**550**

Elective – IV		
1.	20CSE321	Design of Substructures
2.	20CSE322	Off Shore Structures
3.	20CSE323	Design of Plates and Shells
Elective – V		
1.	20CSE331	Design of Composite Structures
2.	20CSE332	Design of Masonry Structures
3.	20CSE333	Formwork Design for Structures

Fourth Semester M.Tech – Structural Engineering Scheme

	Course Code	Course Name	Teaching Department	L:T:P (Hrs/week)	Total Credits	Marks
1	20CCT41	Dissertation Phase II	CV	0-0-14	6	100
2	20CCT42	Dissertation Phase III	CV	0-0-14	6	100
3	20CCT43	Dissertation final Viva Voce	CV	0:0:04	4	100
Total				**0-0-32**	**16**	**300**

First Semester M. Tech- Construction Technology Scheme

Sl. No	Subject Code	Subject	Teaching Department	L-T-P (Hrs/week)	Total Credits	Marks
1	20CCT11	Mechanization in Construction	CV	4-0-0	4	100
2	20CCT12	Advances in Construction Material	CV	4-0-0	4	100
3	20CCT13	Construction Project Management	CV	4-0-0	4	100
4	20CCT14	Risk and Material management	CV	3-0-0	4	100
5	20CCT15X	**Elective- I**	CV	0-0-2	3	100
6	20CCT16	Material Characterization Laboratory	CV	2-0-0	2	100
7	20CCT17	Research Methodology & IPR	CV	2-0-0	2	100
Total				21-0-2	23	700

Elective- I

1	20CCT151	Infrastructure Planning
2	20CCT152	Repair and Rehabilitation of Structures
3	20CCT153	Design of Energy Efficient Buildings

Second Semester M. Tech-Construction Technology Scheme

Sl. No	Subject Code	Subject	Teaching Department	L-T-P (Hrs/week)	Total Credits	Marks
1	20CCT21	Construction Quality and Safety	CV	4-0-0	4	100
2	20CCT22	Construction Economics and Finance	CV	4-0-0	4	100
3	20CCT23	Construction Contract Management	CV	4-0-0	4	100
4	20CCT24X	**Elective – II**	CV	4-0-0	4	100
5	20CCT25X	**Elective – III**	CV	4-0-0	4	100
6	20CCT26	Project Management lab	CV	0-0-3	2	100
7	20CCT27	Technical Seminar-I	CV	0-0-0	1	50
Total				20-0-4	23	650

Elective – II

1	20CCT241	Pre Engineered Construction Technology
2	20CCT242	Advanced Construction Techniques
3	20CCT243	Soil Exploration and Ground Improvement Techniques

Elective – III

1	20CCT251	Lean Construction and Supply Chain Management
2	20CCT252	Quantity Surveying & Billing
3	20CCT253	Remedial Engineering

Third Semester M. Tech- Construction Technology Scheme

Sl. No	Course Code	Course Name	Teaching Department	L-T-P (Hrs/week)	Total Credits	Marks
1.	20CCT31	Energy and Buildings	CV	4-0-0	4	100
2.	20CCT32x	**Elective – 4**	CV	4-0-0	4	100
3.	20CCT33x	**Elective – 5**	CV	4-0-0	4	100
4.	20CCT34	Dissertation Phase 1	CV	0-0-20	10	100
5.	20CCT35	Internship/Term paper/Mini project	CV	0-0-4	3	100
6.	20CCT36	Technical Seminar-II	CV	0-0-4	1	50
Total				**12-0-28**	**26**	**550**
Elective – IV						
1.	20CCT321	Construction Method Statement Procedures				
2.	20CCT322	Pavement Design and Construction				
3.	20CCT323	Building Services and Maintenance				
Elective – V						
1	20CCT331	Construction and Demolition Waste Management				
2	20CCT332	Formwork Design for Structures				
3	20CCT333	Quantitative Methods In Construction				

Fourth Semester M. Tech- Construction Technology Scheme

	Course Code	Course Name	Teaching Department	L-T-P (Hrs/week)	Total Credits	Marks
1	20CCT41	Dissertation Phase II	CV	0-0-14	6	100
2	20CCT42	Dissertation Phase III	CV	0-0-14	6	100
3	20CCT43	Dissertation final Viva Voce	CV	0-0-04	4	100
Total				**0-0-32**	**16**	**300**

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU
An Autonomous Institute under VTU, Belagavi

NAGARJUNA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Proceedings of the Academic Council Meeting #6 held on 17.08.2019

The Academic Council Meeting #6 was held on 17.08.2019, at 11.00 AM in the Chamber of the Principal.

The agenda for the meeting were as follows:

1. Review of the minutes of the previous meeting.
2. Approval of the results for the AY 2018-19.
3. Amendment of regulation.
4. Scheme for students from 200 Credits to 175 credits.
5. Approval of resolution of BOS and JBOS.
6. Approval of Scheme & Syllabus for the AY 2019-20.
7. Project Funding.
8. Graduation Day.
9. MOU with Sri Sathya Sai Institute of Higher Learning.
10. Major activities in the College.
11. Civil Engineering Job Mela and Placement statistics.
12. Civil Engineering students Internship in NCC.
13. Any other matter with the permission of the chair

The members present:

1.	Dr. Srikanta Murthy K, Principal	Chairman
2.	Dr. G N Mohan Babu, Principal, BMS Institute of Technology, Bengaluru	Nominees of University (VTU)
3.	Dr. Nagesh Poojary, Lead Technical Architect, Continental Technical Center, Bengaluru	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
4.	Mr. Deerendra Madhusudhan, Chief Technology Officer, PthinkS, Bengaluru	
5.	Mr. R Anish Simha, Senior General Manager, Rinac India Ltd, Bengaluru	
6.	Dr. S G Gopala Krishna, Professor, Dept. of Mechanical Engg.	Teachers representing different level of teaching staff, Member
7.	Dr. Yogeesha. H.C, COE & Prof. Dept. of Mechanical Engg.	
8.	Dr. Nagesh K N, HOD- Dept. of ECE	Member
9.	Dr. Gururaj Murtugudde, HOD- Dept. of CSE	Member
10.	Dr. Mamatha G, HOD- Dept. of ISE	Member
11.	Dr. Kapilan N, HOD- Dept. of Mechanical Engg	Member
12.	Dr. D.L. Venkatesh Babu, HOD- Dept. of Civil Engg.	Member
13.	Dr. Prachi Beriwala, HOD- Dept. of MBA	Member
14.	Dr. P Harisha, Vice Principal & Prof. in Physics	Member Secretary

3. Amendment of regulation

Principal explained the guidelines from the VTU regarding the vertical progression, Award of B.E degree, B.E (Honors) degree and mandatory courses in III and IV semester. He also explained the necessity of amendment of regulations to fulfill the guidelines given by VTU.

Following are the Amendments of Regulations proposed:

3.1 Vertical Progression:-

As per the instructions from VTU Circular dated 31.7.2019, following changes are proposed.

- There shall be no restriction for promotion from an odd semester to the next even semester.

- Mandatory non credit courses shall not be considered for Vertical progression.

- Students having not more than **FOUR F** grades in the two semesters of **first year** shall be eligible to move to **second year.**

- Students having not more than **FOUR F** grades in the **four semesters of I and II year** shall be eligible to move to **III year.**

- Students who have earned all the prescribed credits of **I year** and having not more than **FOUR F** grades in the **four semesters of II and III year** shall be eligible to move to **IV year.**

3.2 Award of Degree:-

- Student shall be declared to have completed the B.E. Programme degree and is eligible for the award of the degree provided has earned the prescribed number of credits.

- For the award of degree, a CGPA >= 5.00 at the end of the programme is mandatory.

- Completion of Additional Mathematics I and II, shall be mandatory for the award of the degree for lateral entry diploma students.

- Over and above the academic credits, every regular student shall earn 100 Activity points and every student admitted through lateral entry should earn 75 Activity points for the award of the degree. This is applicable to students taking admission starting from 2018-19 (regular) and 2019-20 for lateral entry students.

- Students transferred from other Universities to fifth semester shall earn 50 activity points. This is applicable to students taking admission starting from 2020-21.

- The activity points earned shall be reflected on the students' eighth semester Grade card.

- In case, student fail to earn the prescribed activity points before the commencement of the 8th semester, 8th semester grade card shall not be issued. 8th Semester grade card shall be issued only after earning the required activity points. Students shall be admitted for the award of the degree only after the release of the 8th semester grade card.

3.3 B.E (Honors) degree

- A student shall be declared to have completed the programme of B.E. degree with Honors if the student has earned additional 20 or more credits through approved online courses.

- Candidate should have a CGPA score of 8.00 and above during the registration.

- Students having backlogs in any of the regular semester courses at any stage are not considered for the scheme.

- The courses from the main curriculum are not to be considered.

- MOOCs from NPTEL/SWAYAM/EDx / Coursera / Udacity, etc with certification is only considered.

- List of MOOCs shall be announced by the department for each semester.

ACM # 06

3.4 Mandatory Courses

- Lateral entry students should register for Additional Mathematics I and II in the regular 3rd & 4th Semesters, respectively.

- Kannada is a mandatory subject in the regular 3rd & 4th Semesters, respectively.

3.5 Gracing policy for award of degree

- A grace up to a maximum of 0.05 shall be considered to overall CGPA for the benefit of a student in awarding the class i.e. if the final CGPA of a student is 6.70, he/she will be awarded "First Class" and 7.70 as "First Class with Distinction" by adding a grace of maximum of 0.05.

The Academic Council resolved to approve above amendments to the regulations.

4. **Scheme for students from 200 Credits to 175 credits:**

   Chairman explained the new credit structure of reduced from 200 to 175 and following points are approved by the Academic Council with respect to reduction.

   ➢ Scheme suggested by the VTU.

   ➢ Irrespective of any Scheme studied at lower level, students are permitted to study the present scheme.

   ➢ Credits earned in 1st year will be proportionately reduced to be in line with present scheme

5. **Approval of resolution of BoS and JBoS:**
   Chairman presented constitution of Joint Board of Studies (JBoS) and resolution of the JBoS Meeting held on 23-07-2019.

   - Academic Council ratified the resolutions of JBoS Meeting.

   - Constitution of JBoS and its resolutions are furnished in **Annexure II**

   - Chairman presented constitution of Board of Studies (BoS) for departments and resolutions of the BOS Meetings

   - Academic Council ratified the Resolution of BoS Meetings.

   - Constitution of BoS for departments and their resolution are furnished in **Annexure III**

6. **Approval of Scheme & Syllabus for the AY 2019-20:**

   Chairman presented the modified Scheme and Syllabus for the I year for the AY 2019-20 and explained its necessity

   - Dr. G N Mohan Babu, enquired about the similarity of the autonomous scheme and VTU scheme in the I year and Principal explained the I year scheme & syllabus was according to guidelines of the VTU.

   - Chairman of each Board of Studies, presented the Scheme and Syllabus, for the III & IV semesters of their respective department for the AY 2019-20 which is approved by the respective BoS.

   - Dr. G N Mohan Babu, opinioned that, electives should be domain oriented & field specific. He also expressed that, concentrate should be on advance courses.

   - Dr. Nagesh Poojary expressed that, electives should increase the competency and employability of students.

   - Academic Council approved the Scheme and Syllabus of the I year & II Year for the AY 2019-20which was approved by the respective BoS and JBoS.

➢ Dr. Srikanta Murthy K, Principal, informed the members About the distribution of 175 credits for the four years(I-40, II-50,III-48,IV-37) and board approved the same.

➢ Principal informed chairman of all BOS,
  - To maintain 08subjects per semester.
  - 01 Credit course CIP should be included in the III sem of ECE, CSE & ISE branches and IV sem of ME & CV.
  - 01 Credit course ENV should be included in the IV sem of ECE, CSE & ISE branches and III sem of ME & CV.

➢ BOS Chairman of various departments presented their respective scheme for the third & fourth semester and explained the structure in detail. After the discussion board resolved the scheme of all departments for III and IV sem.

➢ Committee approved the modifications made in the first year syllabus from the AY 2019-20.

Finally Dr. Harisha P, Prof., and Vice Principal, Member Secretary thanked all members for their active participation in the discussion.

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Davanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Resolution of the BoS Meeting - EC
Minutes of the Board of Studies meeting held on 02.07.2019

The BoS meeting for the academic year 2019-2020 to revise the syllabus was conducted on 2nd July 2019 and the following points were discussed & recommended.

1. The proposed syllabus for the academic year 2019-2020 was presented and discussed in the presence of BoS members and the BoS VTU Nominee.

2. It was suggested that Mathematical subjects integral transforms with sci lab and Fourier series and probability theory of third and fourth semester syllabus was appreciated as their syllabus contents were framed according to the needs of ECE core subjects.

3. The Co's and Po's of all the subjects of 3rd and 4th semester were verified.

4. Syllabus of 3rd and 4th semester subjects was verified with the existing syllabus. The changes made in the proposed syllabus was delivered before VTU BoS nominee.

5. Dr.Rajesh .N , BoS VTU nominee suggested not to have E –resources in the syllabus copy. Instead they can be suggested to students in class if required.

6. The syllabus structure of higher semester was verified and few suggested were given.

7. 7th semester had 2 open electives. BoS VTU nominee suggested to have one open elective and one core subject to enhance the core ECE knowledge.

8. Introduction of personality development subjects in every semester was appreciate.

9. Assignment tools and evaluation scheme introduced in 3rd and 4th semester was appreciated.

Board of Studies

Department of Computer Science & Engineering
&
Department of Information Science & Engineering

Sl. No.	Category	Name	Affiliation	Designation in the Board
1.	Chairman	Dr. Gururaj Murtugudde	Professor & Head, CSE, NCET, Bengaluru	Chairman
2.	Faculty Members	Dr. Srikanta Murthy K	Principal, NCET, Bengaluru	Member
		Dr. Mamatha G	Professor & Head, ISE, NCET, Bengaluru	Member
		Dr. Shantakumar B Patil	Professor, CSE, NCET, Bengaluru	Member
		Mrs. Prabha S N	Associate Professor, CSE, NCET, Bengaluru	Member
		Mrs. Swathi S	Associate Professor, CSE, NCET, Bengaluru	Member
		Mr. Gopinath A R	Associate Professor, CSE, NCET, Bengaluru	Member
		Mrs. Bhagya M	Associate Professor, CSE, NCET, Bengaluru	Member
		Mr. Ashok S Patil	Associate Professor, ISE, NCET, Bengaluru	Member
		Mr. Kishore P J	Associate Professor, ISE, NCET, Bengaluru	Member
3.	Subject experts nominated by Academic Council	Dr. Mamatha H R	Professor, CSE, PES University, Bengaluru	Member
		Dr. Ashwin Kumar	Professor, CSE, Reva University, Bengaluru	Member
4.	Expert nominee by Vice-Chancellor, VTU	Dr. Suresh L	Principal, Cambridge Institute of Technology, Bengaluru	Member
5.	Expert from Industry nominated by Academic Council	Mr. Chandrappa	Associate Director Projects, Cognizant	Member
		Mr. Krupesh Bhat	CEO and Founder, Legal Desk	Member
6.	Meritorious Alumnus	Mr. Bhargav Sridhar	Software Engineer, IBM, Bengaluru	Member
7.	College Co-opts	Dr. Premjyoti Patil	Professor, E&CE, NCET, Bengaluru	Member
		Mrs. Kavitha G	Assistant Professor, Mathematics, NCET, Bengaluru	Member

ACM # 06

Resolution of the BoS Meeting – CS & IS
Minutes of Board of Studies Meeting held on 28.06.2019

Agenda: 1. Approval of Computer Concepts and 'C' Programming Syllabus for the I/ II Semester.

2. Approval of 3rd and 4th semester Scheme and Syllabus from the AY 2019-20

1. Dr. Gururaj Murtugudde, HOD, Dept. of CSE welcomed all members and introduced the external subject and industrial experts, VTU nominee & Alumni representative to the members.

2. The discussion started with the need of changing the syllabus and actions to be taken to bridge the gap between industry and institute.

   Following are the opinions of the different members:

3. **Dr. Suresh L, Principal, CIT and VTU Nominee** suggested
   i) 3rd/4th semester syllabus must include a project with one credit and the project must cover the topics learnt in that semester
   ii) Industry must be involved in the evaluation of the project.
   iii) Introduce lab programs related to real time scenarios.
   iv) Introduce more theory along with problems in mathematics related subjects.
   v) Shift the course Analog and Digital Electronics from elective to core subject.
   vi) The course Creating Interactive and Responsive Web Pages can be an elective subject

4. **Mr. Chandrappa, Associate Director Projects, Cognizant and Industry Expert** proposed
   i) To identify three or four domains and have lab setups with the help of company tie-ups.
   ii) Inculcate interest in students regarding security and software engineering

5. **Mr. Krupesh Bhat, CEO and Founder, Legal Desk and Industry Expert** suggested that there must be collaborative environment while students undergo Mock project. Students must be grouped in larger teams so that the work load can be divided. The project on same concept can then be continued in the next semester.

6. **Mr. Bhargav Sridhar, Software Engineer, IBM, Bengaluru and Alumni Representative** recommended
   i) Students should undergo one or two month training in a start-up company.
   ii) They should have online exposure and participate in Hackathons.
   iii) The Course Analog and Digital Electronics must be included in core subjects.

7. **Dr. Mamatha H R, Professor, CSE, PES University and Subject Expert** put forth her idea that
   i) Students should have concept based learning.
   ii) The Course Web 1 must be in 3rd sem and Web 2 in subsequent semester.
   iii) Include core courses related to Networks.

8. **Dr. Premjyoti Patil, Professor, E&CE, NCET** and Coopt member said that Analog and Digital Electronics may be changed from elective to Core subject.

9. **Dr. Srikanta Murthy K, Principal, NCET** explained the structure of theory, integrated and elective subjects and the courses offered in open electives like NPTEL Courses and MOOCs.

10. **Dr. Gururaj Murtugudde, HOD, CSE** summarized the suggestions of all the experts by balancing industry requirements and norms of the regulatory authorities.

Finally, the Chairman thanked all members and requested their cooperation and valuable inputs in future in achieving the academic excellence.

Board of Studies
Department of Mechanical Engineering

Sl. No.	Category	Name	Affiliation	Designation in the Board
1.	Chairman	Dr. N. Kapilan	Professor & Head, ME, NCET, Bengaluru	Chairman
2.	Faculty Members	Dr. D.G. Kantharaju	Professor, NCET, Bengaluru	Member
		Mr. L.J. Naik	Associate Professor ME, NCET, Bengaluru	Member
		Mr. Shashikanth G. S.	Assistant Professor, ME, NCET, Bengaluru	Member
		Mr.Prashanth Kumar	Assistant Professor, ME, NCET, Bengaluru	Member
		Mr. Balaji Y.S.	Associate Professor ME, NCET, Bengaluru	Member
3.	Subject experts nominated by Academic Council	Dr.Jagadeeshwaran N	Professor, ME, REVA University, Bengaluru.	Member
		Mr.Mahesh C. P.	Engineer, Rolls Royce Bengaluru.	Member
4.	Expert nominee by Vice-Chancellor, VTU	Dr. Vasudeva Madav	Professor, ME,NITK, Surathkal	Member
5.	Expert from Industry nominated by Academic Council	Mr. Mittakola Venkanna	Director, Product Engineering, Ingersoll Rand Technologies and services private Ltd., Bengaluru.	Member
6.	Meritorious Alumnus	Mr. Abilash K Prabhu	Energy and CFD Analyst,All India Institute of Local Self Government	Member
7.	College Co-opts	Dr.Shantha Kumar Patil	Professor, CSE, NCET, Bengaluru	Member
		Mr. Kavitha G	Asst Professor, Mathematics, NCET, Bengaluru	Member

ACM # 06

Resolution of the BOS Meeting – ME
Minutes of Board of Studies Meeting held on 17.07.2019

The BoS meeting was convened in the Chairman chamber of the Mechanical Engineering Department Board on 17th July 2019. Dr. N. Kapilan, Chairman, BoS of Mechanical Engineering Department welcomed the members of the BoS for the meeting.

Agenda:

1. **Scheme and Syllabus for Mechanical Engineering.**
2. **Suggest Methodologies for innovative teaching and evaluation techniques.**
3. **Any other academic matter.**

After welcoming all the BoS Members and staff members, Chairman briefed about the proceedings of previous BoS meetings and the inputs received from that and the implementation of the same. He also explained the methodology followed in drafting the scheme and syllabus for the 1st and 2nd year of B.E. Mechanical Engineering. He also detailed the drafting process where AICTE Model curriculum is considered as base in deciding the credits for the various courses as total credits were reduced from 200 to 175 and feedback received from various professional societies, alumni, faculty memebrs and parents. Keeping all these in view staff members in the department were divided in to different groups based on their specialization like design, thermal, manufacturing and Interdisciplinary. Each group of staff members had thoroughly gone through the scheme and syllabus of premier institutions, VTU, JNTU and autonomous colleges. They had discussion in tehir group based on the feedbacks received from various stake holders and finally drafted the scheme and syllabus. Each group have presented their syllabus during department meeting and finally scheme and syllabus was finalized.

After explaining the procedure followed in finalizing the draft scheme and syllabus in front of BoS members, the chariman has requested the BoS members to give their suggestions. After through scrutiny of the presented scheme and syllabus the BoS members had made the following comments or suggestions and approved the same.

1) Firstly the BoS members appreciated the integrated course concept that was framed by the department in the areas of Design Engineering, Thermal Engineering and Manufacturing Engineering as they provide good exposure for the students in the respective areas of engineering.

2) When it comes to Engineering Mathematics-3, they appreciated the change in the syllabus that is brought in, which is more relevant to mechanical engineering with the new title Integral Transforms, but raised their concerns over the number of credits which appears to be less and asked to check the possibility of increasing the teaching hours and credits and approved the same.

3) The BoS members suggested to check the possibilities in bringing back the manual drafting in CAMD course which was completely computerized nowadays, As manual sketching gives better understanding and approved the same.

4) The BoS Members felt that Automobile engineering-1 is losing its shine and technology shift is observed and hence they suggested to modify the course content and Rename it as Electrical mobility or conventional mobility.

Board of Studies
Department of Civil Engineering

Sl. No.	Category	Name	Affiliation	Designation in the Board
1.	Chairman	Dr. Venkatesh Babu D L	Professor & Head, Civil, NCET, Bengaluru	Chairman
2.	Faculty Members	Dr. K. Kumar	Professor and Dean R&D, NCET, Bengaluru	Member
		Dr. Harish V	Professor NCET, Bengaluru	Member
		Mr. Divya Shrinath	Associate Professor NCET, Bengaluru	Member
		Dr. L.Pinky Devi	Associate Professor NCET, Bengaluru	Member
		Mr. Sanath Kumar. K.R	Associate Professor NCET, Bengaluru	Member
		Mrs. Ramyashree M	Assistant Professor, NCET, Bengaluru	Member
		Mr. Mandeep B V	Assistant Professor, NCET, Bengaluru	Member
3.	Subject experts nominated by Academic Council	Dr. Ramesh B R	Professor & Head, NMIT Bengaluru	Member
		Dr. B. C. Udayashankar	Professor,RVCE Bengaluru	Member
4.	Expert nominee by Vice-Chancellor, VTU	Dr. P. S. Niranjan	Professor & Head, Civil, NHCE Bengaluru	Member
5.	Expert from Industry nominated by Academic Council	Mr. Madava Reddy	HR Manager NCC	Member
		Mr. Sunil R K	CEO 3E Services Bengaluru	Member
6.	Meritorious Alumnus	Mr. Niroop V	Managing Director V Design & Construct	Member
7.	College Co-opts	Dr. Kapilan N	Professor & Head, Mech. Dept NCET, Bengaluru	Member
		Mr. Rameshgowda V B	Professor, Mathematics, NCET, Bengaluru	Member

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Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (D)-Pin: 562164

Resolution of the BOS Meeting - CV
Minutes of the Board of Studies meeting held on 20.06.2019

Chairman welcomed all the members for the Board of Studies meeting.

The following points were discussed in the meeting.

1. Scheme has to be modified for 3rd and 4th Semester by considering all the semester based on the VTU guidelines
2. In the scheme of syllabus, the teaching department is to be changed to BOS.
3. The scheme for all the semesters (I to VIII) needs to be freeze to 175 credits.
4. Revised CO and PO mapping needs to be prepared and affixed to all the subjects.
5. Each subject should have 5 course objectives and 5 course outcomes to maintain uniformity.
6. Each module has to mention/ map with CO separately.
7. Each subject should have number of books/reference/ e- learning.
8. The revised syllabus of BMCT is approved in the meeting.
9. The revised syllabus of SOM is approved in the meeting.
10. The revised syllabus of Surveying is approved in the meeting. Also the number of credits is reduced from 4 to 3.
11. The revised syllabus of Engineering Geology is approved in the meeting. Also the number of credits is reduced from 4 to 3.
12. From Foundation Elective -1, Rural water supply and sanitation and Solid waste management have removed. This can be given for higher elective.
13. Construction Technique and Practices is given as Foundation Elective -1.
14. The revised syllabus of Surveying Practice 1 is approved in the meeting.
15. The revised syllabus of Fluid Mechanics is approved in the meeting. Also the number of credits is reduced from 4 to 3.
16. The revised syllabus of Structural Analysis 1 is approved in the meeting.
17. The revised syllabus of Building Planning and Drawing is approved in the meeting. Also the number of credits is reduced from 4 to 3.
18. The revised syllabus of Advanced Concrete Technology is approved in the meeting.
19. From Engineering Elective -1, remote sensing and GIS is to be removed.
20. The revised syllabus of Smart Materials is approved in the meeting.
21. The revised syllabus of Concrete Laboratory is approved in the meeting.

For students, those who join from other university, additional credits can be gained by taking online courses or other subjects which the student has not taken previously. Following subjects are recommended to Mr.J Sri TejaVarma (USN: 1NC16CV900)

a) Course Code 17CVT 361 (Ecology and Environmental impact assessment)
b) Course Code 17CVT 453 (Advanced Concrete Technology)

Suggestion:

a) NPTEL courses needs to be implemented for faculty members and students.
b) Software lab such as building automation, SAP, big data analytics etc. can be introduced as open elective.

Chairman thanks all the members for the contribution in framing the syllabus by attending the meeting.

Board of Studies
Department of Basic Science

Sl. No	Category	Members	Designation	Designation on Board
1.	Chairman	Dr. Harisha P	Prof.& Vice-Principal, NCET	Chairman
2.	VTU nominee	Dr. Fakruddin Khasim	Prof & Head, Dept of Basic Science, Ghousia College of Engineering, Ramanagaram.	Member
3.	Subject Expert nominated by Academic Council	Dr.K.N.Uday Kumar	Prof. Dept of Mathematics, REVA university, Bangalore.	Member
4.	Expert from Industry nominated by Academic Council	Dr. Ganesh B M	Group Leader-Analytical, BIONEEDS INDIA PRIVATE LTD. Peenya, Bangalore.	Member
5.	Faculty	Dr. M V Sarvesha	Prof. & HOD, Dept of Mathematics, NCET	Member
6.	Faculty	Mr. Ramesh Gowda	Associate Prof. Dept of Mathematics,NCET	Member
7.	Faculty	Dr. Manjunatha K	Prof. & HOD, Dept of Chemistry,NCET	Member
8.	Faculty	Dr. Harish K N	Associate Prof. Dept of Chemistry, NCET	Member
9.	Faculty	Prof. Sharada T	Associate Prof. & HOD, Dept of Physics, NCET	Member
10.	Faculty	Smt. Archana B S	Asst Prof. Dept Of Physics, NCET	Member
11.		Dr. Yogeesha H C	COE, Professor in Dept of Mechanical Engineering	Member
12.	Co-opts from college	Dr. Shantakumar Patil	Professor, Dept of CSE	Member
13.		Dr. Venkatesh Kumar	Professor, Dept of ECE	Member

Board of Studies

Department of Master of Business Administration

Sl. No.	Category	Name	Affiliation	Designation in the Board
1.	Chairman	Mrs.Poornima U.K	Associate Professor, MBA, NCET, Bengaluru	Chairman
2.	Faculty Members	Dr. Vala Ghanshyam Kantilal	Professor,MBA, NCET, Bengaluru	Member
		Dr. Dhakshayini K.N.	Professor,MBA, NCET, Bengaluru	Member
		Mr.Muralikrishna	Associate Professor, MBA, NCET, Bengaluru	Member
		Mr. Biraj Ameet Anil	Associate Professor, MBA, NCET, Bengaluru	Member
		Mr. Lokesh G.R.	Assistant Professor, MBA, NCET, Bengaluru	Member
		Ms. Rajeswari G.V.	Assistant Professor, MBA, NCET, Bengaluru	Member
		Mr.Sriram S.	Assistant Professor, MBA, NCET, Bengaluru	Member
		Ms.Seema B.	Assistant Professor, MBA, NCET, Bengaluru	Member
3.	Subject experts nominated by Academic Council	Dr. Venkataraman R.	Dean, Centre for Management Studies, Presidency College, Bengaluru	Member
		Dr.Prachi Beriwala	Professor, Centre for Management Studies, Presidency College, Bengaluru	Member
4.	Expert nominee by Vice-Chancellor, VTU	Dr. Raveendra P.V.	Professor & Head, Department of MBA, M.S.Ramaiah Institute of Technology, Bengaluru	Member
5.	Expert from Industry nominated by Academic Council	Mr.M.R.Bharadwaj	Head-Business Development, Helio Engineering (P) Ltd., Bengaluru	Member
6.	Meritorious Alumnus	-	-	-
7.	Special Invitees	Dr. S.G.GopalaKrishna	Director, NES	Member
		Dr. Srikanta Murthy K	Principal, NCET, Bengaluru	Member
		Dr. Yogeesha H.C.	Controller of Examinations, NCET	Member

ACM # 06

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Devanahalli (Tq) Bengaluru (Dt.) Pin: 562164

24

ANNEXURE IV

Scheme of the 1st & 2nd Year UG programmes

First Semester – Physics Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19MAT11	Calculus and Linear Algebra	MAT	3-2-0-0	4	100
2.	19PHY12	Engineering Physics	PHY	3-0-0-0	3	100
3.	19CEF13	Civil Engineering Foundation	CV	3-0-0-0	3	100
4.	19CED14	Computer Aided Engineering Drawing	ME	2-0-4-0	4	100
5.	19ELN15	Basic Electronics(IC)	EC	2-0-2-0	3	100
6.	19PHL16	Engineering Physics Lab	PHY	1-0-2-0	2	100
7.	19CSD17	Communication Skill Development-I	HSS	0-2-0-0	1	100
		Total		14-4-8-0	20	700

First Semester – Chemistry Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19MAT11	Calculus and Linear Algebra	MAT	3-2-0-0	4	100
2.	19CHE12	Engineering Chemistry(IC)	CHE	3-0-2-0	4	100
3.	19CCP13	Computer Concepts & C Programming	CS/IS	3-0-0-0	3	100
4.	19MEF14	Mechanical Engineering Foundation (IC)	ME	2-0-2-0	3	100
5.	19ELE15	Basic Electrical Engineering(IC)	EC	2-0-2-0	3	100
6.	19CPL16	Computer Programming Lab	CS/IS	1-0-2-0	2	100
7.	19CSD17	Communication Skill Development-I	HSS	0-2-0-0	1	100
		Total		14-4-8-0	20	700

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.) Pin 562164

Second Semester – Physics Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19MAT21	Differential Equations & Statistical Methods	MAT	3-2-0-0	4	100
2.	19PHY22	Engineering Physics	PHY	3-0-0-0	3	100
3.	19CEF23	Civil Engineering Foundation	CV	3-0-0-0	3	100
4.	19CED24	Computer Aided Engineering Drawing	ME	2-0-4-0	4	100
5.	19ELN25	Basic Electronics(IC)	EC	2-0-2-0	3	100
6.	19PHL26	Engineering Physics Lab	PHY	1-0-2-0	2	100
7.	19CSD27	Communication Skill Development-II	HSS	0-2-0-0	1	100
		Total		**14-4-8-0**	**20**	**700**

Second Semester – Chemistry Cycle

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19MAT21	Differential Equations & Statistical Methods	MAT	3-2-0-0	4	100
2.	19CHE22	Engineering Chemistry(IC)	CHE	3-0-2-0	4	100
3.	19CCP23	Computer Concepts & C Programming	CS/IS	3-0-0-0	3	100
4.	19MEF24	Mechanical Engineering Foundation (IC)	ME	2-0-2-0	3	100
5.	19ELE25	Basic Electrical Engineering(IC)	EC	2-0-2-0	3	100
6.	19CPL26	Computer Programming Lab	CS/IS	1-0-2-0	2	100
7.	19CSD27	Communication Skill Development-II	HSS	0-2-0-0	1	100
		Total		**14-4-8-0**	**20**	**700**

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

ACM # 06

Third Semester B.E. - ECE Scheme

Sl. No.	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	18ECM31	Integral Transforms with SCILAB (IC)	Maths	3-0-2-0	4	100
2.	18ECT32	Analog Electronic Circuits	EC	4-0-0-0	4	100
3.	18ECI33	Digital Electronic Circuits(IC)	EC	3-0-2-0	4	100
4.	18ECI34	Network Analysis (IC)	EC	3-0-2-0	4	100
5.	18ECT35X	Foundation Elective –I	EC	4-0-0-0	4	100
6.	18ECL36	Analog Electronic Circuits Laboratory	EC	1-0-2-0	2	100
7.	18CSD37	Career Skill Development Programme	S&H	1-2-0-0	2	100
8.	18CPH38	Constitution of India and Professional Ethics and Human Rights	S&H	1-0-0-0	1	100
		TOTAL		**20-2-8-0**	**25**	**800**

Foundation Elective –I

Sl. No.	Course Code	Course Name
1.	18ECT351	Engineering Electromagnetics
2.	18ECT352	Data Structures with C
3.	18ECT353	Electronic Devices

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Fourth Semester B.E- ECE Scheme

Sl. No	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	18ECM41	Fourier Series and Probability Theory (IC)	Maths	3-0-2-0	4	100
2.	18ECT42	Fundamentals of HDL	EC	4-0-0-0	4	100
3.	18ECI43	Signals and Systems (IC)	EC	3-0-2-0	4	100
4.	18ECI44X	Foundation Elective –II (IC)	EC	3-0-2-0	4	100
5.	18EET45X	Engineering Elective – III	EC	4-0-0-0	4	100
6.	18ECL46	Fundamentals of HDL Lab	EC	1-0-2-0	2	100
7.	18CSD47	Technical Report Writing &IRDP	S&H	1-0-2-0	2	100
8.	18KAK38 / 18KAK38	Vyavaharika Kannada / Adalitha Kannada	S&H	1-0-0-0	1	100
TOTAL				20-2-10-0	25	800

Foundation Elective –II (IC)

Sl. No.	Course Code	Course Name
1.	18ECI441	Linear Integrated Circuits & Applications
2.	18ECI442	Transmission Lines and Wave Guides (TLWG)
3.	18ECI443	Electronic Instrumentation

Engineering Elective –III

Sl. No.	Course Code	Course Name
1.	18EET451	Renewable Energy Resources
2.	18EET452	Introduction to Cyber Security and Cyber Laws
3.	18EET453	Management Information System
4.	18EET454	Environmental Air Pollution

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

ACM # 06

Third Semester BE – CSE & ISE Scheme

Sl. No.	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Credits	Marks
1.	18CSM31	Integral Transforms & Applications (IC)	Maths	3-0-2-0	4	100
2.	18CST32	Fundamentals of Computation Engineering	CSE/ISE	4-0-0-0	4	100
3.	18CST33	Data Structures using C	CSE/ISE	4-0-0-0	4	100
4.	18CSI34	Analog and Digital Electronics (IC)	CSE/ISE	3-0-2-0	4	100
5.	18CSI35X	Foundation Elective-I (IC)	CSE/ISE	3-0-2-0	4	100
6.	18CSL36	Data Structures Laboratory	CSE/ISE	1-0-2-0	2	100
7.	18CSH37	Career Skill Development Programme	S & H	1-2-0-0	2	100
8.	18CPH38	Constitution of India and Professional Ethics and Human Rights	S & H	1-0-0-0	1	100
		Total		20-2-8-0	25	800

Foundation Elective –I

Sl. No.	Course Code	Course Name
1.	18CSI351	Design of Dynamic Web Pages
2.	18CSI352	Fundamentals of Multimedia
3.	18CSI353	Unix and Shell Programming

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Fourth Semester BE – CSE & ISE Scheme

Sl. No.	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Credits	Marks
1.	18CSM41	Statistics and Probability Using R (IC)	Maths	3-0-2-0	4	100
2.	18CST42	Design and Analysis of Algorithms	CSE/ISE	4-0-0-0	4	100
3.	18CST43	Computer Organization and Architecture	CSE/ISE	4-0-0-0	4	100
4.	18CSI44X	Foundation Elective-II (IC)	CSE/ISE	3-0-2-0	4	100
5.	18EET45X	Engineering Elective-III	CSE/ISE	4-0-0-0	4	100
6.	18CSL46	Design and Analysis of Algorithms Laboratory	CSE/ISE	1-0-2-0	2	100
7.	18CSH47	Technical Report Writing & IRDP	S & H	1-0-2-0	2	100
8.	18KAK38 / 18KAK38	Vyavaharika Kannada / Adalitha Kannada	S & H	1-0-0-0	1	100
		Total		21-0-8-0	25	800

Foundation Elective-II (IC)

Sl. No.	Course Code	Course Name
1.	18CSI441	Introduction to Embedded Processors
2.	18CSI442	Cloud Computing and Virtualization
3.	18CSI443	Object Oriented programming using JAVA (IC)

Engineering Elective-III

Sl. No.	Course Code	Course Name
1.	18EET451	Renewable Energy Sources
2.	18 EET452	Introduction to Cyber Security and Cyber Laws
4.	18 EET453	Management Information Systems
5.	18EET454	Environmental Air Pollution

Third Semester B.E. – ME Scheme

Sl. No.	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Credits	Marks
1.	18MEM31	Integral Transforms & Calculus of Variations (IC)	ME	3-0-2-0	4	100
2.	18MET32	Measurements and Manufacturing Process	ME	4-0-0-0	4	100
3.	18MEI33	Mechanics of Materials (IC)	ME	3-0-2-0	4	100
4.	18MET34	Computer Aided Machine Drawing	ME	2-0-4-0	4	100
5.	18MET35X	Foundation Elective-I	ME	4-0-0-0	4	100
6.	18MEL36	Measurements and Manufacturing Process Laboratory	ME	1-0-2-0	2	100
7.	18MEH37	Technical Report Writing & IRDP	S & H	1-0-2-0	2	100
8.	18KAK38 / 18KAK38	Vyavaharika Kannada / Adalitha Kannada	S & H	1-0-0-0	1	100
Total				19-0-12-0	25	800

Foundation Elective-I

Sl. No.	Course Code	Course Name
1.	18MET351	Automotive Mobility
2.	18MET352	Engineering Metallurgy
3.	18MET353	Statistics and Probability

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Fourth Semester B.E. – ME Scheme

Sl. No.	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Credits	Marks
1.	18MEI41	Thermal Engineering (IC)	ME	3-0-2-0	4	100
2.	18MET42	Machine Tools and Operations	ME	4-0-0-0	4	100
3.	18MEI43	Kinematics of Machines (IC)	ME	3-0-2-0	4	100
4.	18MET44X	Foundation Elective-II	ME	4-0-0-0	4	100
5.	18MET45X	Engineering Elective-III	ME	4-0-0-0	4	100
6.	18MEL46	Machine Shop Laboratory	ME	1-0-2-0	2	100
7.	18MEH47	Career Skill Development Programme	S & H	1-2-0-0	2	100
8.	18CPH48	Constitution of India, Professional Ethics and Human Rights	S & H	1-0-0-0	1	100
		Total		21-2-6-0	25	800

Foundation Elective – II

Sl. No.	Course Code	Course Name
1.	18MET441	Electrical Mobility
2.	18MET442	Advanced Material Science
3.	18MET443	Additive Manufacturing

Engineering Elective – III

Sl.No	Course Code	Course
1.	18EET451	Renewable Energy Resources
2.	18EET452	Introduction to Cyber Security and Cyber Laws
3.	18EET453	Management Information System
4.	18EET454	Environmental Air Pollution

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Fourth Semester B.E. – CV Scheme

Sl. No.	Course Code	Course	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	18CVM41	Calculus of Complex Functions and Probability Distribution (IC)	Maths	3-0-2-0	4	100
2.	18CVI42	Surveying (IC)	CE	3-0-2-0	4	100
3.	18CVT43	Structural Analysis-I	CE	3-0-0-0	3	100
4.	18CVT44X	Foundation Elective-II	CE	3-0-0-0	3	100
5.	18EET45X	Engineering Elective-III	CE	4-0-0-0	4	100
6.	18CVI46	Building Planning and Drawing (IC)	CE	3-0-2-0	4	100
7.	18CVH47	Career Skill Development Programme	S&H	1-2-0-0	2	100
8.	18CPH48	Constitution of India , Professional Ethics and Human Rights	S&H	1-0-0-0	1	100
		TOTAL		21-2-6-0	25	800

Foundation Elective-II

Sl. No.	Course Code	Course Name
1.	18CVT441	Alternative Building Material And Technology
2.	18CVT442	Advanced Concrete Technology
3.	18CVT443	Green Buildings

Engineering Elective-III

Sl. No.	Course Code	Course Name
1.	18EET451	Renewable Energy Sources
2.	18 EET452	Introduction to Cyber Security and Cyber Laws
3.	18 EET453	Management Information Systems
4.	18 EET454	Environmental Air Pollution

Scheme of the 1st & 2nd Year MBA programme

Scheme of Study - First Semester MBA

I. No	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19MBA11	Management & Organizational Behaviour	MBA	3-0-0-4	4	100
2.	19MBA12	Executive Communication and Soft Skills Development	MBA	3-0-2-0	4	100
3.	19MBA13	Business Regulations	MBA	3-0-0-0	3	100
4.	19MBA14	Managerial Economics	MBA	3-0-0-4	4	100
5.	19MBA15	Accounting for Managers	MBA	3-0-0-4	4	100
6.	19MBA16	Statistics for Managers	MBA	3-0-0-4	4	100
7.	19MBA17	Business Research Methods	MBA	3-0-0-0	3	100
		Total		**21-0-2-16**	**26**	**700**

L – Lecture   T-Tutorials   P-Practical   S – Self Study

Scheme of Study - Second Semester MBA

Sl. No	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19MBA21	Human Resources Management	MBA	3-0-0-0	3	100
2.	19MBA22	Marketing Management	MBA	3-0-0-0	3	100
3.	19MBA23	Financial Management	MBA	3-0-0-4	4	100
4.	19MBA24	Business Ethics and Corporate Governance	MBA	3-0-0-0	3	100
5.	19MBA25	Operations Research	MBA	3-0-0-4	4	100
6.	19MBA26	International Business	MBA	3-0-0-4	4	100
7.	19MBA27	Fundamentals of Business Analytics	MBA	2-0-2-0	3	100
8.	19MBA28	In-plant Training	MBA *	0-0-0-16	4	100
		Total		**20-0-2-28**	**28**	**800**

L – Lecture   T-Tutorials   P-Practical   S – Self Study

- **19MBA28** - In-plant training for four weeks in between First and Second Semester

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Third Semester – MBA Scheme

Sl. No	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	18MBA31	Strategic Management	MBA	3-0-0-4	4	100
2.	18MBA32	Entrepreneurship Development	MBA	3-0-0-4	4	100
3.	18MBA33	Certification Course	External Training	0-0-8-0	4	100
4.	18MBAHR34X	**HUMAN RESOURCE***	MBA	3-0-0-0	3	100
5.	18MBAMM34X	**MARKETING***	MBA	3-0-0-0	3	100
6.	18MBAFM34X	**FINANCE***	MBA	3-0-0-0	3	100

* Two papers are to be selected from a pool of 4 papers in each of the two selected specialization (HR & Mktg / Mktg & & Fin / HR & Fin)

		HUMAN RESOURCE				
4.	18MBAHR341	Strategic Human Resource Management	MBA	3-0-0-0	3	100
	18MBAHR342	Performance Management and Reward System	MBA	3-0-0-0	3	100
	18MBAHR343	International Human Resource Management	MBA	3-0-0-0	3	100
	18MBAHR 344	Labour Laws	MBA	3-0-0-0	3	100

		MARKETING				
5.	18MBAMM341	Consumer Behaviour	MBA	3-0-0-0	3	100
	18MBAMM342	Supply Chain and Logistics Management	MBA	3-0-0-0	3	100
	18MBAMM343	Sales and Retail Management	MBA	3-0-0-0	3	100
	18MBAMM344	Services Marketing	MBA	3-0-0-0	3	100

		FINANCE				
6.	18MBAFM341	Advance Financial Management	MBA	3-0-0-0	3	100
	18MBAFM342	Security Analysis and Portfolio Management	MBA	3-0-0-0	3	100
	18MBAFM343	Indian Tax System	MBA	3-0-0-0	3	100
	18MBAFM344	Cost Management	MBA	3-0-0-0	3	100
Total				18-0-8-8	24	700

L – Lecture   T-Tutorials   P-Practical   S – Self Study

Certification Course:

a. **Advanced Excel**

b. **Six Sigma**

Fourth Semester – MBA Scheme

Sl. No	Course Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	18MBA41	Project Work	MBA	0-0-0-48	12	300
2.	18MBAHR42X	**HUMAN RESOURCE***	MBA	3-0-0-0	3	100
3.	18MBAMM42X	**MARKETING***	MBA	3-0-0-0	3	100
4.	18MBAFM42X	**FINANCE***	MBA	3-0-0-0	3	100

* Two papers are to be selected from a pool of 4 papers in each of the two selected specialization (HR & Mktg / Mktg & & Fin / HR & Fin)

		HUMAN RESOURCE				
2.	18MBAHR421	Consultancy Management	MBA	3-0-0-0	3	100
	18MBAHR422	Human Resource Analytics	MBA	3-0-0-0	3	100
	18MBAHR423	Leadership Development	MBA	3-0-0-0	3	100
	18MBAHR424	Personal Growth and Interpersonal Effectiveness	MBA	3-0-0-0	3	100

		MARKETING				
3.	18MBAMM421	Strategic Brand Management	MBA	3-0-0-0	3	100
	18MBAMM422	International Marketing	MBA	3-0-0-0	3	100
	18MBAMM423	Integrated Marketing Communications and Social Media	MBA	3-0-0-0	3	100
	18MBAMM424	Rural Marketing	MBA	3-0-0-0	3	100

		FINANCE				
4.	18MBAFM421	Financial Derivatives	MBA	3-0-0-0	3	100
	18MBAFM422	Project Appraisal, Planning and Control	MBA	3-0-0-0	3	100
	18MBAFM423	Mergers Acquisitions and Corporate Restructuring	MBA	3-0-0-0	3	100
	18MBAFM424	International Financial Management	MBA	3-0-0-0	3	100
	Total			12-0-0-48	24	700

L – Lecture   T-Tutorials   P-Practical   S – Self Study

- Optional Certification Course in each specialization against a course can be allowed.

M.Tech Structural Engineering

First Semester

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19CSE11	Advanced Design of RCC Structures	Civil Engineering	4-0-0-0	4	100
2.	19CSE12	Mechanics of Deformable Bodies	Civil Engineering	4-0-0-0	4	100
3.	19CSE13	Computational Structural Mechanics	Civil Engineering.	4-0-0-0	4	100
4.	19CSE14	Structural Dynamics	Civil Engineering	4-0-0-0	4	100
5.	19CSE15X	**Elective- I**	Civil Engineering	4-0-0-0	4	100
6.	19CSE16	Structural Engg. Lab – 1	Civil Engineering	0-0-2-0	1	100
7.	19CSE17	Research Methodology & IPR	Civil Engineering	2-0-0-0	2	100
		Total		**22-0-2-0**	**23**	**700**

Elective- I		
1	19CSE151	Advanced Design of Pre-stressed Concrete Structures
2	19CSE152	Design of Precast & Composite Structures
3	19CSE153	Repair and Rehabilitation of Structures

Second Semester

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	19CSE21	Advanced Design of Steel Structures	Civil Engineering	4-0-0-0	4	100
2.	19CSE22	Earthquake Resistant Design of Structures	Civil Engineering	4-0-0-0	4	100
3.	19CSE23	Finite Element Methods and Analysis	Civil Engineering	4-0-0-0	4	100
4.	19CSE24x	**Elective – 2**	Civil Engineering	4-0-0-0	4	100
5.	19CSE25x	**Elective – 3**	Civil Engineering	4-0-0-0	4	100
6.	19CSE26	Structural Engg. Lab – 2	Civil Engineering	0-0-2-0	1	100
7.	19CSE27	Seminar	Civil Engineering	0-0-0-4	1	100
		Total		**20-0-2-4**	**22**	**700**

Elective – 2		
1.	19CSE241	Design concept of Substructures
2.	19CSE242	Design of Concrete Bridges
3.	19CSE243	Optimization of Structures
Elective – 3		
1.	19CSE251	Design of Tall Structures
2.	19CSE252	Structural Health Monitoring
3.	19CSE253	Reliability analysis of Structures

ACM # 06

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

M.Tech Structural Engineering

Third Semester

SI. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	18CSE31	Stability of Structures	Civil Engineering	4-0-0-0	4	100
2.	18CSE32x	**Elective – 4**	Civil Engineering	4-0-0-0	4	100
3.	18CSE33x	**Elective – 5**	Civil Engineering	4-0-0-0	4	100
4.	18CSE34	Dissertation Phase–1 & Seminar	Civil Engineering	0-0-4-4	3	100
5.	18CSE36 5	Internship/Term paper/Mini project	Civil Engineering	0-0-0-24	6	100
		Total		**12-0-4-28**	**21**	**500**

Elective – 4

1.	18CSE321	Design of Floating Structures
2.	18CSE322	Advanced Construction Techniques
3.	18CSE323	Design of Plates and Shells

Elective – 5

1.	18CSE331	Design of Composite Structures
2.	18CSE332	Design of Masonry Structures
3.	18CSE333	Formwork Design for Structures

Fourth Semester

SI. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	18CSE41	Dissertation Phase II	Civil Engg.	0-0-20-48	22	300
		Total		**0-0-20-48**	**22**	**300**

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

M.Tech Construction Technology

First Semester -Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	19CCT11	Mechanization in construction	Civil Engg.	4-0-0-0	4	100
2	19CCT12	Advances in construction material	Civil Engg.	4-0-0-0	4	100
3	19CCT13	Construction project management	Civil Engg.	4-0-0-0	4	100
4	19CCT14	Structural Masonry	Civil Engg.	4-0-0-0	4	100
5	19CCT15X	**Elective- I**	Civil Engg.	4-0-0-0	4	100
6	19CCT16	Material Characterization Laboratory	Civil Engg.	0-0-2-0	1	100
7	19CCT17	Research Methodology & IPR	Civil Engg.	2-0-0-0	2	100
		Total		**22-0-2-0**	**23**	**700**

Elective- I		
1	19CCT151	Infrastructure Planning
2	19CCT152	Earthquake resistant structures
3	19CCT153	Building Science

Second Semester - Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	19CCT21	Construction quality Assurance and Control	Civil Engg.	4-0-0-0	4	100
2	19CCT22	Construction Economics and Finance	Civil Engg.	4-0-0-0	4	100
3	19CCT23	Construction and Contract Management	Civil Engg.	4-0-0-0	4	100
4	19CCT24x	**Elective – 2**	Civil Engg.	4-0-0-0	4	100
5	19CCT25X	**Elective – 3**	Civil Engg.	4-0-0-0	4	100
6	19CCT26	Software application lab	Civil Engg.	0-0-2-0	1	100
7	19CCT27	Seminar	Civil Engg.	0-0-0-4	1	100
		Total		**20-0-2-4**	**22**	**700**

Elective – 2		
1	19CCT241	Pre Engineered Construction Technology
2	19CCT242	Advanced Construction Techniques
3	19CCT243	Soil exploration and Ground Improvement techniques
Elective – 3		
1	19CCT251	Pavement design and construction
2	19CCT252	Quantity Surveying & Billing
3	19CCT253	Remedial Engineering

M.Tech Construction Technology

Third Semester

I. No	Course Code	Course Name	Teaching Department	L-T-P-S (Hrs/week)	Total Credits	Marks
.	18CCT31	Energy and Buildings	Civil Engg.	4-0-0-0	4	100
.	18CCT32x	**Elective – 4**	Civil Engg.	4-0-0-0	4	100
.	18CCT33x	**Elective – 5**	Civil Engg.	4-0-0-0	4	100
.	18CCT34	Dissertation Phase 1 & Seminar	Civil Engg.	0-0-4-4	3	100
.	18CCT36	Internship/Term paper/Mini project	Civil Engg.	0-0-0-24	6	100
		Total		**12-0-4-28**	**21**	**500**

	Course Code	Course Name
lective – 3		
.	18CCT321	Construction Method Statement Procedures
.	18CCT322	Building Services and Maintenance
.	18CCT323	Repair and Rehabilitation of structures
lective – 4		
	18CCT331	Construction and Demolition Waste Management
	18CCT332	Formwork Design for Structures
	18CCT333	Disaster Management Techniques

Fourth Semester

. No	Course Code	Course Name	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
L	18CCT41	Dissertation Phase II	Civil Engg.	0-0-20-48	22	300
		Total		**0-0-20-48**	**22**	**300**

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

ANNEXURE V

Major Activities of the College

1. Celebrated Inter Collegiate cultural fest IKYA – 2018 on 26.10.2018 & 27.10.2018, the chief guest was Shri Allu Arjun, Actor & Shri Ramesh Arvind, Actor.
2. Mechanical Engineering students successfully completed project titled "Concept Evolution of Separation Mechanism for Nano/ Pico Satellite" at ISRO, Bengaluru.
3. 3rd semester ECE students' secured first place in WEBENCH - Drishti Online Contest program organised by TI University on 28.08.2018.
4. Celebrated Founder's day & Teacher's Day on 05.09.2018.
5. ECE students participated in AK-EDUSAT symposium organised by ISRO at GKVK, Bengaluru on 07.09.2018.
6. NCET Alumni Meet "REJOICE 2018" at Hotel Taj Vivanta on 09.09.2018.
7. Students participated in Climate change quiz at IISc, Bengaluru on 11.09.2018
8. Mr. Shaan Ibrahim (1NC15IS042) participated in South Asian Young Leaders Conference held at Chengdu, China from 17.09.2018 to 24.09.2018.
9. Participation of faculty in "Smart India Hackathon-2019" regional workshop at "Center for Management Studies", Jain University on 01.10.2018.
10. Students participated in Indo Sweden quiz at RVCE on 03.10.2018.
11. Dr. Kapilan N, Prof. & Head, Dept. of ME attend RAL CRC Conference at Antalya, Turkey organized by ASHRAE Turkish Chapter from 05.10.2.18 to 07.10.2018.
12. Prof. Osman Turan and Prof. Dhruva Kumar from University of Strathclyde, UK visited our campus and interacted with our students on 15.10.2018.
13. ISE students participated at IDEATION program at Malnad College of Engineering, Hassan on 16.10.2018.
14. VTU - Monitoring, Evaluation & Continuation of Autonomy committee visit on 14.11.2018
15. Dr. A B Halageri, Director, PPIRS Inaugurated state level Science Fest on 16.11.2018.
16. Department of Mechanical Engineering in association with ISHRAE organized HVAC Quiz 2019-National level quiz quarter finals on 10.01.2019.
17. International women's day was celebrated; the Chief Guest was Ms. Aparna Atreya, Founder Story Triangle & Mrs. Sridevi Ranga Raju, Founder Member, NES at NCET on 08.03.2019.
18. Department of Mechanical Engineering in association with ISHRAE organized Technical fest "SPARKO FIESTA" on 23.03.2019.
19. Inauguration of Job Mela for Civil Engineering students on 11.04.2019.
20. Career Building by Mr. Vidyaranya Kollipal, Associate VP – HR, M/s. Mphasis, Bengaluru on 01.06.2019.
21. Celebrated International yoga day on 21.06.2019.
22. Likhitha C S, 8th semester Mech Engg won Distinguished Paper Award held at Indian Institute of Science, Bengaluru on 28.06.2019 & 29.06.2019.
23. Inauguration of First year B.E. Programme by Mr. D Keshava Kumar, Chief Executive, L & T construction Equipments Limited on 05.08.2019.
24. NCET Faculty Cricket Team won the PES International staff tournament.
25. VTU Intercollegiate Hand Ball Tournament held at NCET.

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU
An Autonomous Institute under VTU, Belagavi

Proceedings of the Academic Council Meeting #5 held on 20.07.2018

The Academic Council Meeting #5 was held on 20.07.2018, at 11.00 AM in the Chamber of the Principal.

The agenda for the meeting were as follows:

1. Nomination of members to the Academic Council
2. NBA Accreditation
3. Approval of Scheme and Syllabus
4. Approval of amendment to the regulations
5. Reduction of Credits
6. Result Analysis for 2017-18
7. Project Funding
8. Project Exhibition
9. Graduation Day
10. Training & Placement
11. National Cyber Security Programme - NCSP
12. Major Activities of the college
13. Any other matter with the permission of the chair

The members present:

1.	Dr. S G Gopala Krishna, Principal	Chairman
2.	Dr. Nanjundaswamy C, Principal, Dr. Ambedkar Institute of Technology, Bengaluru	Nominees of University (VTU)
3.	Dr. T Ananthapadmanabha, Principal, NIE Institute of Technology, Mysuru	
4.	Dr. G N Mohan Babu, Principal, BMS Institute of Technology, Bengaluru	
5.	Mr. Deerendra Madhusudhan, Chief Technology Officer, PthinkS, Bengaluru	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
6.	Mr. BK Ramesh, Managing Director, Zen Building Solutions Pvt., Ltd., Bengaluru	
7.	Dr. P Harisha, Dean(SW) & Prof. in Physics	Teachers representing different level of teaching staff, Member
8.	Dr. N Sandhya, COE & Prof. in MBA	
9.	Dr. Nagesh K N, HOD-ECE	Member
10.	Dr. Mamatha G, HOD-ISE	Member
11.	Dr. Kapilan N, HOD-ME	Member
12.	Dr. Nagendra V, HOD-CV	Member
13.	Dr. Srikanta Murthy K, Vice Principal (Aca) & HOD- CSE	Member

Members Absent:

1.	Dr. Nagesh Poojary, Lead Technical Architect, Continental Technical Center, Bengaluru	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
2.	Mr. R Anish Simha, Senior General Manager, Rinac India Ltd, Bengaluru	
3.	Dr. K. Kumar, Dean (R&D) & Prof. in Civil Engg	Teachers representing different level of teaching staff, Member

Minutes of the Meeting:

Dr. S.G. Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Chairman, welcomed all the members to the fifth Academic Council meeting.

1. **Nomination of members to the Academic Council**

The Chairman welcomed all the new members to the Academic Council meeting and requested them to extend their co-operation.

2. **NBA Accreditation**

Chairman informed to the council that, the NBA Expert team has visited the college during 4th to 6th May 2018 for the accreditation of all 5 UG Programmes. He also informed that, the college got NBA accreditation for 4 UG Programs from the academic year 2018-19 to 2020-21.
   - Electronics & Communication Engineering
   - Information Science & Engineering
   - Civil Engineering
   - Mechanical Engineering

All council members congratulated the Management, Principal and all staff members for achieving this success.

3. **Approval of 1st year Scheme and Syllabus**

Chairman explained the Scheme of Study of I and II semester UG programmes. He also informed the council that, as per the guidelines from AICTE & VTU, the institution is planning to organize induction programme for the first year students for 3 weeks.

Dr. G N Mohan Babu expressed that, the present scheme of teaching offered by the college is very good.

The Academic Council resolved to approve the Scheme and Syllabus for First year UG programmes. The approved Scheme and Syllabus is provided in the **Annexure-I.**

4. **Approval of amendment to the regulations**

The chairman explained the condition of some students who got detained due to non-completion of 1st year courses for admission to 3rd year. Some students detained only due to one course of this nature. Dr. T Ananthapadmanabha opined that, the student loosing eligibility due to one subject can be considered based on the Guinness of the case. The members discussed in detail regarding the vertical progression and agreed to amend the regulation as follows:

Vertical Progression: Minimum standards for SGPA and CGPA together with the minimum number of credits are laid down for the vertical progression of students. This facilitates the mobility of students from one college to another and also avoids confusion among the students. The vertical progression of students is applied between two academic years only.

The following are the prescribed standards for vertical progression:

- Maximum number of 'F' Grades that can be carried at the end of any academic year is **FOUR** only.
- The maximum number of withdrawals at any given time shall not exceed two courses subject to maintaining the minimum registration requirements.
- The standard for CGPA=5.00 at the end of each academic year.

The chairman explained that, as per VTU & AICTE norms the mandatory courses such as Constitutional India and Professional Ethics, Environmental Studies shall be offered during 2nd year because of the introduction of mandatory three weeks induction programme for 1st year students.

The Academic Council resolved to approve amendments to the regulations.

5. Reduction of Credits

Chairman informed that, AICTE has reduced the credits from 200 to 160 for Under Graduate BE Programmes and VTU recommended the number of credits as 175. NCET has decided to follow VTU recommendation.

6. Result Analysis for the Academic year 2017-18

Chairman briefed the result of both odd and even semesters of Autonomous Programme. Members were happy with the results. The Result analysis is provided in **Annexure – II.**

7. Project Funding

➢ Members were informed that the VTU has sanctioned Rs.50,000/- for 10 UG projects. Two projects were selected for Project Exhibition cum Competition which was held on 28th June 2018 at VTU, Belagavi.

➢ Board of Research in Nuclear Science (BRNS) has sponsored research project for Rs. 19.63 Lakhs.

Members congratulated Principal and concerned Principal Investigators for receiving funds.

8. Project Exhibition
VI Semester Project Exhibition was held on 4th & 5th May 2018 and VIII Sem Project Exhibition was held on 19th May 2018.

9. Graduation Day
Graduation day for Under Graduate 2014-2018 batch was held on 11th June 2018.

10. Training & Placement
Chairman has explained about the placements made during the academic year. Members were happy with the placement Status.

The placement details are provided in **Annexure – III.**

11. National Cyber Security Programme – NCSP
Two faculty members attended the National Cyber Security Faculty Development Program from 22nd to 24th June 2018 at Rajarajeswari Medical College Campus, Bengaluru.

12. Major activities of the college
Chairman listed the activities conducted in the college. Activities list is provided in the **Annexure – IV.**

13. Any other Matter with the Permission of the Chair

The Chairman told the members that, the request of Mr. Darshan Bhat (2017ECE0072) for Change of College and Change of Branch from E & C, Presidency University to Civil Engineering, NCET has been verified and candidate may be considered for admission in our institution. Further informed that, the BOS in Civil Engineering has recommended that he has to study 17CPL26 – Computer Programming and laboratory during BE 2nd Year.

The extract of the resolution of the Board of Studies meeting on Equivalence Certificate in its meeting held on 16/06/2018 have been verified. The Academic Council has resolved to consider equivalence of subjects for admission in our institution.

As there was no other matter to discuss, the Chairman thanked the members for their valuable suggestions and solicited their co-operation in all future activities of the institution.

***

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Date: 20.07.2018

CIRCULAR

All the members of the BOS - Basic Science & Humanities department are hereby informed to attend the meeting for finalization of the 1st year syllabus for the academic year 2018-19 on 26.07.2018 at 11.00 AM in the Dean chamber.

P. Harisha.

Chairman – BOS
(Basic Science & Humanities)

Copy to,

Dr. K Shridhar, Prof & Head, Dept of Maths, KVG College of Engg, Sullia – VTU Nominee
Dr. Mahesh, Prof & Chairman, Dept of Electronics, Bangalore University,
Dr. Ashok A, Prof. Dept of Chemistry, DSU, Bangalore
Dr. Ramesh G K, DGM-Technical Kongovi Private Ltd, Bangalore
Mr. Anil Kumar, Kamaljeeth Instruments, Bangalore.
Dr. K.N. Uday Kumar, Prof. Dept of Mathematics, REVA University, Bangalore.
Prof. Sharada T, and Smt. Archana B S – Physics
Dr. Manjunatha K, and Dr. Harish K N - Chemistry
Prof. M V Sarvesha, and Mr. Ramesh Gowda V B –Mathematics.

PRINCIPAL.
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

A meeting of all the members of the BOS - Basic Science & Humanities department is conveyed in Dean Chamber on 26.07.2018 (Saturday) at 11:00AM.

Agenda:

Finalizing the 1st year syllabus for the academic year 2018-19.

BOS- Basic Science & Humanities department meeting – 03

Sl. No	Members	Designation	Signature
1.	Dr. P Harisha	Prof.& Dean, NCET	P. Harisha.
2.	Dr. K Shridhar	Prof & Head, Dept of Maths, KVG College of Engg, Sullia – VTU Nominee	- AB -
3.	Prof. M V Sarvesha	Prof. & HOD, Dept of Mathematics, NCET	
4.	Dr. Manjunatha K	Prof. & HOD, Dept of Chemistry, NCET	
5.	Dr. Mahesh	Prof. Dept of Physics, Bangalore University	
6.	Dr. Ashok S	Prof. Dept of Chemistry, DSU, Bangalore	Ank.
7.	Dr. Ramesh G K	DGM-Technical Kongovi Private Ltd, Bangalore.	-AB -
8.	Mr. Anil Kumar	Kamaljeeth Instruments, Bangalore.	
9.	Dr.K.N.Uday Kumar	Prof. Dept of Mathematics, REVA university, Bangalore.	Uday kumar
10.	Prof. Sharada T	Associate Prof. & HOD, Dept of Physics, NCET	
11.	Smt. Archana B S	Asst Prof. Dept Of Physics, NCET	
12.	Dr. Harish K N	Associate Prof. Dept of Chemistry, NCET	KN
13.	Mr. Ramesh Gowda	Associate Prof. Dept of Mathematics, NCET	

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.) Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

<u>Proceedings of the BOS - Basic Science & Humanities department meeting -03:</u>

- A meeting was held on 26.07.2018 with the members of the BOS - Basic Science & Humanities department for finalizing first year syllabus for Engineering Mathematics-I, Engineering Mathematics-II, Engineering Physics, Engineering Physics Lab, Engineering Chemistry for the academic year 2018 - 19. Minor corrections were made after going through the syllabus thoroughly in the respective subjects consequently syllabus for the respective subjects were finalized for the academic year 2018 – 19 and was forwarded for the approval from the Academic Council.

Chairman – BOS
(Basic Science & Humanities)

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

It is hereby informed to the following faculty members to attend BOS (Basic Science) meeting to be held on 29-06-2019 at 11.00AM at Vice-Principal's Chamber.

Sl. No	Members	Designation	Signature
1.	Dr. Harisha P	Prof.& Vice-Principal, NCET	P.Harisha
2.	Dr. Fakruddin Khasim	Prof & Head, Dept of Basic Science, Ghousia College of Engineering, Ramanagaram.	— AB —
3.	Dr. K.N.Uday Kumar	Prof. Dept of Mathematics, REVA university, Bangalore.	— AB —
4.	Dr. Ganesh B M	Group Leader-Analytical, BIONEEDS INDIA PRIVATE LTD. Peenya, Bangalore.	— AB —
5.	Dr. M V Sarvesha	Prof. & HOD, Dept of Mathematics, NCET	*signature*
6.	Mr. Ramesh Gowda	Associate Prof. Dept of Mathematics, NCET	*signature*
7.	Dr. Manjunatha K	Prof. & HOD, Dept of Chemistry, NCET	— AB —
8.	Dr. Harish K N	Associate Prof. Dept of Chemistry, NCET	*signature*
9.	Prof. Sharada T	Associate Prof. & HOD, Dept of Physics, NCET	*signature*
10.	Smt. Archana B S	Asst Prof. Dept Of Physics, NCET	*signature*
11.	Dr. Yogeesha H C	COE, Professor in Dept of Mechanical Engineering	*signature*
12.	Dr. Shantakumar Patil	Professor, Dept of CSE	*signature*
13.	Dr.Venkatesh Kumar	Professor, Dept of ECE	*signature*

signature   P.Harisha.

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.) Pin: 562164

Annexure – I

Scheme of the 1st Year UG programmes

ANNEXURE I

Scheme of the 1st Year UG programmes

First Semester – Physics Cycle

Sl. No.	Course Code	Course Name	Teaching Dept	L:T:P (Hrs/week)	Total Credits	Marks
1	18MAT11	Engineering Mathematics-I	MAT	3:2:0	4	100
2	18PHY12	Engineering Physics	PHY	3:0:0	3	100
3	18CEF13	Civil Engineering Foundation	CV	3:0:0	3	100
4	18CED14	Computer Aided Engineering Drawing	ME	2:0:4	4	100
5	18ELN15	Basic Electronics (IC)	EC	2:0:2	3	100
6	18PHL16	Engineering Physics Laboratory	PHY	1:0:2	2	100
7	18CSD17	Communication Skill Development	HSS	0:2:0	1	100
		Total		**14:4:8**	**20**	**700**

First Semester – Chemistry Cycle

Sl. No.	Course Code	Course Name	Teaching Dept	L:T:P (Hrs/week)	Total Credits	Marks
1	18MAT11	Engineering Mathematics-I	MAT	3:2:0	4	100
2	18CHE12	Engineering Chemistry (IC)	CHE	3:0:2	4	100
3	18CCP13	Computer Concepts and C Programming	CS/IS	3:0:0	3	100
4	18MEF14	Mechanical Engineering Foundation (IC)	ME	2:0:2	3	100
5	18ELN15	Basic Electrical Engineering (IC)	EC	2:0:2	3	100
6	18CPL16	Computer Programming Laboratory	CS/IS	1:0:2	2	100
7	18CSD17	Communication Skill Development-I	HSS	0:2:0	1	100
		Total		**14:4:8**	**20**	**700**

Second Semester – Physics Cycle

Sl. No.	Course Code	Course Name	Teaching Dept	L:T:P (Hrs/week)	Total Credits	Marks
1	18MAT21	Engineering Mathematics-II	MAT	3:2:0	4	100
2	18PHY22	Engineering Physics	PHY	3:0:0	3	100
3	18CEF23	Civil Engineering Foundation	CV	3:0:0	3	100
4	18CED24	Computer Aided Engineering Drawing (IC)	ME	2:0:4	4	100
5	18ELN25	Basic Electronics (IC)	EC	2:0:2	3	100
6	18PHL26	Engineering Physics Laboratory	PHY	1:0:2	2	100
7	18CSD27	Communication Skill Development-II	HSS	0:2:0	1	100
		Total		**14:4:8**	**20**	**700**

Second Semester – Chemistry Cycle

Sl. No.	Course Code	Course Name	Teaching Dept	L:T:P (Hrs/week)	Total Credits	Marks
1	18MAT21	Engineering Mathematics-II	MAT	3:2:0	4	100
2	18CHE22	Engineering Chemistry (IC)	CHE	3:0:2	4	100
3	18CCP23	Computer Concepts and C Programming	CS/IS	3:0:0	3	100
4	18MEF24	Mechanical Engineering Foundation (IC)	ME	2:0:2	3	100
5	18ELN25	Basic Electrical Engineering (IC)	EC	2:0:2	3	100
6	18CPL26	Computer Programming Laboratory	CS/IS	1:0:2	2	100
7	18CSD27	Communication Skill Development-II	HSS	0:2:0	1	100
		Total		**14:4:8**	**20**	**700**

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU

An Autonomous Institute under VTU, Belgaum

NAGARJUNA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Proceedings of the Academic Council Meeting#3 held on 15.06.2017

The Academic Council Meeting#3was held on 15.06.2017, at 11.00am in Chamber of the Principal.

The agenda for the meeting were as follows:

1. Review of the minutes of the previous meeting.
2. Approval of Scheme and Syllabus for Third year & Fourth Year UG programmes
3. Approval of Open Electives and Certification Courses
4. Approval of amendment to the regulations
5. Result Analysis of First to Fourth Semester for the Academic year 2016-17.
6. Equivalent courses to be studied by Change of College Students
7. Visit of UGC team and conferment of Autonomous status
8. VTU LIC Visit
9. Major Academic Activities of the college
10. Active Nodal Centre recognition of Virtual Lab
11. Placement statistics for the year 2016-17
12. Project Grants and Funding
13. MOUs with different industries
14. Any other matter with the permission of the Chair.

The members present:

1.	Dr. S G Gopala Krishna, Principal	Chairman
2.	Mr. Nitin Awasthi, Vice President Technical APSIS Solutions, Bengaluru	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
3.	Mr. Rajesh Nambiar, Head Vmware IT Academy, Asia Pacific and Japan (APJ) region	
4.	Dr. T V Govindaraju, Principal, KSIT, Bengaluru	Nominees of University (VTU)
5.	Dr. Chaitanya Kumar M V, Principal, HKBK College of Engg, Bengaluru	
6.	Dr. N G S Udupa	Teachers representing different level of teaching staff Member
7.	Dr. P Harisha, Basic Science	

8.	Dr. Rajendra S, Civil Engg	Member
9.	Dr. Nagesh K N, ECE	Member
10.	Dr. Shantakumar B Patil, CSE	Member
11.	Prof. Ashok Patil, ISE	Member
12.	Dr. N Kapilan, ME	Member
13.	Dr. N Sandhya, MBA	Member
14.	Dr. Srikanta Murthy K	Member Secretary

Members Absent:

1.	Dr. V Ramachandra, Vice President Ultra Tech Cements	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
2.	Mr. Madhukar, Director, Climatics, Bengaluru	

Minutes of the Meeting:

Dr. S.G.Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Chairman, Academic Council welcomed all the members to the meeting. The council congratulated the founder chairman of the Nagrjuna construction Company, Padmashree Dr.AVS Raju for having received the HMTV Business Excellence Award-2017. Chairman introduced Dr.Srikanta Murthy.K, Vice Principal (Academics) as new Member secretary of the Academic council to all the members of the academic council

1. **Review of the minutes of the previous meeting.**

   ➢ The Chairman informed the members that Approved Syllabus copies of all programmes for First and Second Year were printed and distributed to the students.
   ➢ Also, Hand Book containing the rules and regulations of Autonomous programmes were printed and distributed to the students

2. **Approval of Scheme and Syllabus for Third and Fourth year UG programmes**

   Chairman requested the respective HoDs' to present the detailed Scheme and syllabus for the III and IV year UG programmes.

   Dr. T.V.Govindaraju enquired about the percentage deviation from the VTU syllabus and Chairman has clarified that the deviation is about 15 to 20 %. He suggested to have common syllabus for Mechatronics offered by Mechanical and Electronics and Communication engineering Departments. He also suggested to include manufacturing domain in foundation electives.

   Mr. Nitin Awasti suggested to involve faculty from Mechanical Engineering department to teach Energy Engineering and Management which was offered as Engineering Elective by

the department of E&C. Also, he suggested to have generic code for Engineering Electives and Open Electives.

The members have appreciated the institution for having introduced General and Technical aptitude and group discussion as credit courses.

Chairman has proposed the modifications of topics in the subjects Mathematics and soft skills for III and IV semester. Also proposed to include new courses in place of existing courses in IV semester Computer Science and Engineering and Civil Engineering branches

The Academic Council resolved to approve the Scheme and Syllabus for Third and Fourth year programmes and the modifications of topics in the subjects Mathematics and soft skills and inclusion new courses. The approved Scheme and Syllabus is provided in the **Annexure-I**. The modifications made in the Mathematics and soft skills of III and IV semester and inclusion of new courses in IV semester is provided in the **Annexure-II**

3. **Approval of Open Electives and Certification Courses**

Chairman has explained the significance of offering open electives and presented the list of open electives that are going to be offered in sixth and seventh semesters. The members have appreciated the introduction of Yoga, Music Marshal Arts and other subjects with societal importance as open electives. The Academic Council resolved to approve the list of open electives which are provided in the **Annexure -III**

4. **Approval of Amendments for Regulations**

The chairman has proposed to rename call supplementary semester as Summer Term and explained the reasons for renaming. The Academic Council resolved to approve amendment to the regulations.

5. **Result Analysis:**

Chairman briefed the result of the First to Forth Semester Autonomous Programme. Members were happy with the results. The Result analysis is provided in **Annexure – IV.**

6. **Equivalent courses to be studied by Change of College Students**

Chairman has explained about the equivalent courses to be studied by the student who have opted for change of college and seeking admission to our institution. The members have approved for the same. The list of equivalent courses are given in **Annexure-V**

7. **Visit of UGC team and conferment of Autonomous status**

Chairman informed to the council that the UGC team has visited the college during 20-21 December 2016 for the conferment of Autonomous status to the college.

He also informed that the college is been conferred Autonomous status for Six years. All council members congratulated the Management, Principal and all staff members for achieving this success

8.   VTU LIC visit

Chairman informed to the council that VTU LIC visited the college during 24th May 2017 for regular inspection

9.   Major Academic Activities of the college:

The chairman has presented the various activities conducted in the college during 2016-2017. The activities conducted are

i.   Open Day and Project Exhibition Competition on 18th and 19th May, 2017

ii.   Two Days All India Seminar on Demonetization on May 4-5, 2017 in Association with Institution of Engineers

iii.   Start Up India Competition on 19/04/2017

iv.   Technotsava -2k17 - Inter Collegiate Technical Fest & Cultural Fest on 24th and 25th March 2017

v.   Workshop on HAM (Amateur Radio) organized by ECE Dept on 04.04.2017

vi.   One Day workshop on Introduction to Industrial Robotics on 23.3.2017

vii.   AQUEST National Level Quiz Competition - Semifinal - held on 30.1.2017

viii.   Free Cancer Detection camp and Eye check up camp on 17.3.2017

ix.   Workshop on Science behind Positive Thinking on 19.1.2017

x.   FDP on life skills for success-relationship and communication skills on 24.11.2016

xi.   A Technical Talk on "Effective Teaching" by Dr. Sudhaker Nayak, Former Director, NITK, Surathkal was organized on 8.11.2016.

xii.   One week training programme on hvac by department of mechanical engineering – nov 9-13, 2016

xiii.   Expert Lecture on High Performance Computing on 22.4.2017 Resource Person : Dr. K C Gouda, Scientist, NAL

xiv.   Achievement of Civil Engineering Students in Project Exhibitions held at Alpha College of Engineering and Technology on 7th may, 2017

xv.   NCET team won Runners up Trophy in Fashion Show Contest held at NMIT, Bangalore on 10.3.2017

xvi.   VTU Inter Zone Hand Ball Tournament on 20th and 21st April 2017

xvii.   World Environment Day Celebration on 5.6.2017

		Format No.	NCET/ADM-2
NAGARJUNA COLLEGE OF ENGG & TECHNOLOGY		Issue No.	03
		Issue Date	22.03.2012
		Rev. No.	00
Department	ELECTRONICS & COMMUNICATION ENGINERING		
Academic Year	2017 – 2018		

CIRCULAR

Board of Studies #04 Meeting of EC Department

We are happy to inform you that our college has been granted with autonomous status from VTU and Government of Karnataka from academic year 2015-16. Board of Studies (BOS) is formed for the syllabus framing & examination related activities of EC department.

Board of Studies #04 Meeting will be held with following details:

Date: 08/06/2017

Time: 11:30 AM

Venue: EC HOD Chamber, NCET, Bangalore.

Agenda:

1. Syllabus finalization for 3rd and 4th year subjects to be handled by EC department.
2. Recommending examiners to academic counsel.
3. Finalization course objectives & outcomes.
4. Any other matter with the permission of the chair.

All members are requested to attend the meeting.

HOD E&CE 8/6/2017

Dept. of Electronics & Communication
Nagarjuna College of Engg. & Technology
Venkatagirikote Post, Bangalore-562 1**

Proceedings of the meeting

The fourth meeting of BOS, ECE for the academic year 2017-2018 was held on 08.06.2017 & the following point were discussed in the presence of all BOS members including the HOD (ECE) & VTU nominated member Dr. Dinesh.P (Professor, DSCE)

1. The subjects for 5th & 8th semester were finalized with minor changes.
2. It was decided to have 3 core subjects & three electives in the 5th sem & one Humanities subject
3. Communication system, microcontroller & ITC are the core subjects & out of the three electives 2 are foundation electives & one 2 engineering electives.
4. In Electives the courses like Object Oriented programming with JAVA, Mechatronics, Energy Engineering and Management, Management Information Systems were to be considered.
5. The two foundation electives are made integrated courses.
6. If there was decided to have 2 core subjects, 3 electives, one humanities subject & one mini project in 6th semester.
7. One of foundation electives was decided to be an integrated course & the other two are engineering electives & open electives
8. New course Database Concepts, Operations Research, Robotics, Internet of Things (IoT), were suggested to introduce
9. Labview, yoga, music, Martial Arts courses were included under open electives for 2 credits.
10. The BOS member have decided to have Integrated Rural Development program in 3rd and 4th semesters.
11. Two core subjects & 4 electives were with project (mini) were included for the 7th sem
12. Power electronics & Data communication were made the core subjects. One of the foundation electives was decided to be made an integrated course three engineering electives & two open electives were finalized.
13. Web technologies, JAVA with Full Stack, Artificial Intelligence, Advanced C Programming and Data Structures, MEMS, Introduction to Embedded System and C Programming, Occupational Safety & Health Administration, various other ssubjectss to be involved in open electives.
14. Model Based Design using MATLAB, Introduction to ARMs processor and its Applications, Advanced Python courses were also adviced to incorporate in the syllabus.
15. 8th semester was decided to be completely project work.

The VTU nominated member Dr. Dinesh.P suggested few point listed below.

1. He has suggested to include more member of core electronics subject in the syllabus
2. He suggested to include Phase –I of the final project in 7th semester & the rest in the 8th semester
3. He suggested to distribute the number of teaching hour equally throughout all the module as we give equal weightage of marks for all the 5 module.
4. He has suggested to give Online certification courses from IITs / IISC / SWAYAM / EDX as a 3 credit course and to implement where were possible in electives.
5. He has suggested to involve Project based learning in 5th and 6th semesters.

Board of Studies
Department Of Electronics & Communication Engineering

Attendance Sheet

Sl.No	Name	Designation	Signature
1	Dr.Nagesh.K.N , Prof & Head	Chairperson	*signature*
2	Mr.Basavaraj .G.M , Assc.Prof	Member	*signature*
3	Mrs.Sendamarai.P, Asst.Prof	Member	*signature*
4	Mrs.Roopa.G, Asst.Prof	Member	G.Roopa
5	Mr.Yaseen Basha, Asst.Prof	Member	*signature*
6	Ms.Swetha.B.M, Asst.Prof	Member	*signature*
7	Mr.Ashoka.C.D, Asst.Prof	Member	Ashoka
8	Dr.K.V Suresh, Professor, SIT , Tumkur	Member	—
9	Dr.Manjunath P, Professor , JNNCE, Shimoga	Member	—
10	Dr.Dinesh P, Professor , Dayanand Sagar College of Engineering , Bengaluru	Member VTU NOMINEE	*signature*
11	Mr.Srinivas M Senior Engineer, Intel, Bengaluru.	Member	—
12	Mr.Vijay Kumar Sajjjanar, BLD Engg. College , Bijapur	Member	—

Dept. of Electronics & Communication
Nagarjuna College of Engg. & Technology
Venkatagirikote Post, Bangalore-562 110

Nagarjuna College of Engineering and Technology, Bengaluru

Department of Information Science and Engineering
(Board of Studies)

Meeting No : BOS-03

Agenda :   08/06/2017

> ➢ To frame the syllabus for fifth semester to eighth semester B.E Programme.
> ➢ Any other matter regarding improvement in the syllabus

The following members have attended the meeting.

SL NO.	Name	Signature
1)	Dr. Srikantamurthy K (Special invitee, Vice Principal Academic, NCET)	
2)	Prof. B. Roopashri Tantri	
3)	Mr. Kishore P.J	
4)	Mr. Ashok. S. Patil	
5)	Mrs. Shanmugapriya R.	
6)	Mrs. Sushmita N.S	
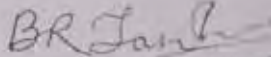
The following members were absent with permission from chairman.
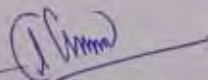
1. Dr. Niranjan Chiplunkar
2. Dr. K G Shinivas
3. Mrs. Suma S
4. Mrs. Priyadarshini R

The meeting of Board of studies in Information science and Engineering was convened on 08/06/2017 in Room No. CS-CG2.The following members were present in the meeting.

1. Prof. B Roopashri Tantri (Chair Person)
2. Dr. Srikantamurthy (Special Invitee, Vice Principal Academic, NCET)
3. Mr. Kishore P.J. (Member)
4. Mr Ashok S. Patil (Member)
5. Mrs. Shanmugapriya R. (Member)
6. Mrs. Sushmita N.S. (Member)
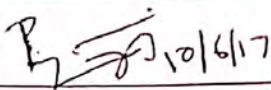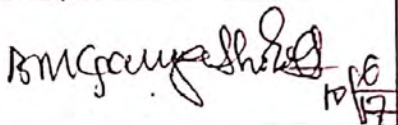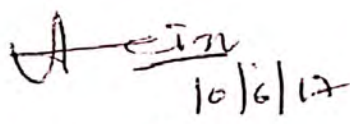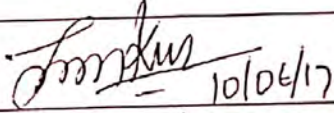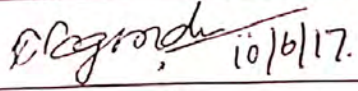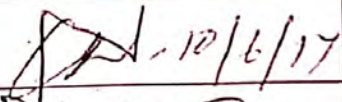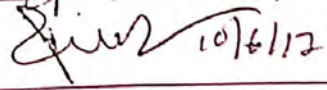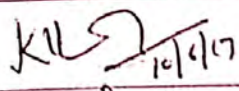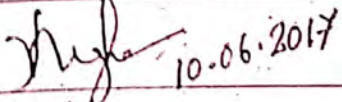
Prof. B Roopashri Tantri , of ISE department formally welcomed the members for the meeting . In her welcome speech, she appreciated the presence of Dr. Srikantamurthy, Vice Principal, Academic, NCET, Bengaluru. She explained the scheme and structure to be incorporated in the department syllabi. She emphasized the need to incorporate the scheme and structure framed by the college authorities to maintain uniformly across the departments. The detailed syllabi of V and VIII semester were presented before the committee for ratification.

BR Tantri

HOD, Information Science & Engg
Nagarjuna College of Engg. & Tech
Devanahalli, Bengaluru-562110

HOD, Information Science & Engg
Nagarjuna College of Engg. & Tech
Devanahalli, Bengaluru-562110

Meeting held on 10/06/2017

ubers of the Board of studies

Name	Nomination of the Committee	Signature
Dr. S Rajendra	Chairperson	10/6/17
Dr. B M Gangadarappa, Professor, JNNCE, Shivamogga	Member, VTU Nominee	BMGangadShL 10/6/17
Dr. G R Manjunath, Professor & Head, Atria Institute of Technology, Bengaluru	Members, Subject Expert from outside	T.B 10/6/17
Mr. Amaranath S N Director, F E Designer	Members, Representative from Industry	10/6/17
Dr. T. M. Mohan Kumar	Member	10/06/17
Prof. Nagendra. V	Member	10/6/17.
Prof. Jagadeesh. C.B	Member	10/6/17
Prof. Sridhar. R	Member	10/6/17
Prof. Vijay. K	Member	10/6/17
Mrs. Megha N Kulkarni	Member	10.06.2017

Minutes of the BOS meeting

The BOS meeting held on 14th July 2017, in the Chamber of Chairman of BOS of Mechanical Engineering Department. Dr. D.G. Kantharaju, Member secretary, BOS welcomed the members for the meeting. Dr.N.Kapilan, Chairman, BOS of Mechanical Engineering again welcomed the members of the BOS and briefed about the MOM of the previous BOS meeting and agenda of today's meeting.

Agenda:
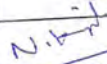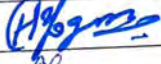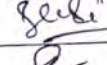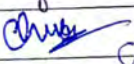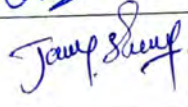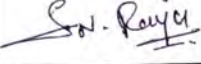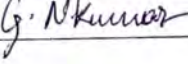
1. Scheme and Syllabus from 5th to 8th semester

2. Any other academic matter

The Chairman of the BOS explained the scheme suggested by the college and also the draft scheme and syllabus suggested by various stake holders such as alumni, employers, parents, faculty to the committee members. Also he highlighted the suggestions given by the professional societies. The BOS members also gone through the scheme and syllabus of other institutions such as NITK, Anna University, VIT, VTU. BMSCE and NMIT. The BOS members along with faculty members has gone through the syllabus drafted by the department of Mechanical Engineering. The BOS members appreciated the AI and Robotics included in the 5th semester. The members have gone through other core subjects offered from 5th to 7th semester and given their approval. The BOS members gone through the foundation elective courses offered in 5th to 7th semester such as composite material technology, power plant engineering, HVAC-1, Non Conventional Machining, Turbomachines, HVAC-II, Engg Management and Entrepreneurship, Hydraulics and Pnuematics and HVAC-III and approved the same. The BOS members appreciated the introduction of PBL and Robotics laboratory in the 5th semester. The BOS members were happy with the inclusion of online courses offered in the open electives and they suggested that it gives an exposure to the students for life long learning approach. The BOS members have gone through the Engineering and open elective subjects and given their approval. They also appreciated the introduction of softskill training programme in the 5th and 6th semester which will help the students to improve their skills. The members have given approval to the laboratory components of 5th, 6th and 7th semester. The concept of one semester project work in the 8th semester will help the students to do their project in industry and this will enable them employable after their graduation. The meeting ended with vote of thanks by the Chairman.

The following are the summary of the meeting

1. The syllabus and scheme of Mechanical Engineering Courses from 5th to 8th semester scrutinized and approved

2. The syllabus and scheme of Foundation Elective Courses, Engg Elective Courses and Open Elective Courses were analyzed and approved

3. The syllabus and scheme of 5th, 6th and 7th semester laboratory were scrutinized and approved

4. The BOS members appreciated the online courses introduced in the scheme and syllabus.

BOS Members

S.No	Name	Designation	Signature
1	Dr.N.Kapilan	Chairman	
2	Dr. Shrishail Kakkeri	Member, VTU Nominee	
3	Dr. D.G. Kantharaju	Member	
4	Prof. Yogeesha H C	Member	
5	Mr.L.J. Naik	Member	
6	Mr. Shashikanth	Member	
7	Mr.Prashanth Kumar	Member	
8	Mr. Chethan Kumar N	Member	
9	Mr.Jayshankar	Engineer, Man Turbo Diesel Bengaluru.	
10	Mr. S N Raju	Director, Saptha Groups, Mallcswaram,Bengaluru	
11	Dr.S.Kasturirengan	Professor, IISc, Bengaluru	
12	Dr.G.N.Kumar	Assoc. Prof, NITK, Surathkal	
13	Dr.Shailesh Rao	Professor & Head KS School of Engg & Management, Bengaluru.	

ANNEXURE I

Scheme and Syllabus for Third and Fourth year programmes

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Fifth Semester B.E. – Scheme

Sl. No	Course Code	Course Name	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15ECT51	Communication Systems	EC	3-0-0-0	3	100
2	15ECT52	Microcontrollers	EC	3-0-0-0	3	100
3	15ECT53	Information Theory & Coding	EC	3-0-0-0	3	100
4	15ECI54X	Foundation Elective-IV (IC)	EC	3-0-2-0	4	100
5	15ECI55X	Foundation Elective-V(IC)	EC	3-0-2-0	4	100
6	15EC56X	Engineering Elective-VI	EC/ME	3-0-0-0	3	100
7	15ECL57	Microcontroller Lab	EC	1-0-2-0	2	100
8	15ECL58	Communication Lab	EC	1-0-2-0	2	100
9	15ECH59	General Aptitude	EC/BS&H	1-0-2-0	2	100
		Total		21-0-10-0	26	900

Foundation Elective-IV (IC)		
SI.NO	Course Code	Course
1	15ECI541	Control Systems
2	15ECI542	Low power VLSI Design
3	15ECI543	Microwave & Radar

Foundation Elective-V (IC)		
SI.NO	Course Code	Course
1	15ECI551	Digital System Design Using Verilog
2	15ECI552	Object Oriented Programming with Java
3	15ECI553	Online certification course from IITs / IISc / SWAYAM / EDX

Engineering Elective-VI		
SI.NO	Course Code	Course
1	15EC561	Mechatronics
2	15EC562	Energy Engineering & Management
3	15EC563	Linear Algebra

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Sixth Semester B.E. – Scheme

Sl. No	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15ECT61	Digital Signal Processing	EC	4-0-0-0	4	100
2	15ECT62	Digital Communication	EC	4-0-0-0	4	100
3	15ECI63X	Foundation Elective VII (IC)	EC	3-0-2-0	4	100
4	15EC64X	Engineering Elective -VIII	EC	3-0-0-0	3	100
5	15ECL65	Digital Signal Processing Lab	EC	1-0-2-0	2	100
6	15HOE66X	Open Elective -IX	EC/BS&H	2-0-0-4	3	100
7	15ECL67	Digital Communication Lab	EC	1-0-2-0	2	100
8	15ECH68	Technical aptitude & GD	EC/BS&H	0-2-0-4	2	100
9	15EC69	Mini Project & Seminar	EC	0-0-4-0	2	100
		Total		**18-2-10-8**	**26**	**900**

ELECTIVE-VII(Foundation Elective) (IC)		
Sl.NO	Course Code	Course
1	15ECI631	Antenna & Propagation
2	15ECI632	Database Concepts
3	15ECI633	Online certification courses from IITs / IISC / SWAYAM / EDX

ELECTIVE-VIII(Engineering Elective)		
Sl.NO	Course Code	Course
1	15EC641	Operations Research
2	15EC642	Robotics
3	15EC643	Internet of Things (IoT)

ELECTIVE –IX(Open Elective)		
Sl.NO	Course Code	Course
1	15HOE661	Lab View – Level 1
2	15HOE662	Yoga & Martial Arts
3	15HOE663	Music (Carnatic/Instrumental)/Dance/Sports
4	15HOE664	Online certification courses from IITs / IISC / SWAYAM / EDX

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Seventh Semester BE – Scheme

Sl. No	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15ECT71	Power Electronics	EC	3-0-0-0	3	100
2	15ECT72	Data Communication	EC	3-0-0-0	3	100
3	15ECI73X	Foundation Elective-X (IC)	EC	3-0-2-0	4	100
4	15EC74X	Engineering Elective-XI	EC/ME/CS	3-0-0-0	3	100
5	15HOE75X	Open Elective-XII	EC/BS&H	2-0-0-4	3	100
6	15HOE76X	Open Elective-XIII	EC/BS&H	2-0-0-4	3	100
7	15ECL77	Power Electronics Lab	EC	1-0-2-0	2	100
8	15ECL78	Data Communication Lab	EC	1-0-2-0	2	100
9	15ECP79	Project Phase I & Seminar	EC	0-0-6-0	3	100
		Total		18-0-12-8	26	900

		Foundation Elective-X(IC)				
SI.NO	Course Code	Course				
1	15ECI731	Optical Fiber Communication				
2	15ECI732	Web Technology				
3	15ECI733	Online certification courses from IITs / IISC / SWAYAM / EDX				

		Engineering Elective-XI				
SI.NO	Course Code	Course				
1	15EC741	Wireless Communication				
2	15EC742	Artificial Intelligence				
3	15EC743	MEMS				

		Open Elective-XII				
SI.NO	Course Code	Course				
1	15HOE751	Tax Management				
2	15HOE752	Assessment of Building Energy Performance (Offered by ASHRAE)				
3	15HOE753	Crisis Management				
4	15HOE754	Online certification courses from IITs / IISC / SWAYAM / EDX				

		Open Elective-XIII				
SI.NO	Course Code	Course				
1	15HOE761	Small & Medium Enterprise Management				
2	15HOE762	Occupational Safety & Health Administration				
3	15HOE763	Animation & Multimedia Engineering				
4	15HOE774	Online certification courses from IITs / IISC / SWAYAM / EDX				

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Eighth Semester BE – Scheme

Sl. No	Course Code	Course	Teaching Dept	Total Credits	Marks
1	15ECP81	Project Phase II & Seminar	EC	4	100
2	15ECP82	Project Phase III & Seminar	EC	4	100
3	15ECP83	Evaluation and Viva voce (External)	EC	10	100
		Total		18	300

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Computer Science and Engineering

Fifth Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15CST51	Computer Networks	CS	3-0-0-0	3	100
2.	15CST52	Microcontrollers(IC)	CS/EC	3-0-2-0	4	100
3.	15CST53	Operating Systems	CS	3-0-0-0	3	100
4.	15CST54	Software Engineering and Testing	CS	3-0-0-0	3	100
5.	15CSI55X	Foundation Elective-IV (IC)	CS	3-0-2-0	4	100
6.	15CST56X	Engineering Elective-V	CS	3-0-0-0	3	100
7.	15CSL57	Computer Networks Laboratory	CS	1-0-2-0	2	100
8.	15CSL58	Operating Systems Laboratory	CS	1-0-2-0	2	100
9.	15CSH59	General Aptitude	CS/BS&H	1-0-2-0	2	100
		Total		**21-0-10-0**	**26**	**900**

Foundation Elective-IV (IC)		
Sl. No	**Course Code**	**Course Name**
1	15CSI551	Advanced Algorithms (IC)
2	15CSI552	Object Oriented Programming with Java (IC)
3	15CSI553	Computer Graphics (IC)

Engineering Elective-V		
Sl. No	**Course Code**	**Course Name**
1	15CST561	Operations Research
2	15CST562	Computer Forensics (MOOCS)
3	15CST563	The Data Scientist's Toolbox (Certificate Course) Johns Hopkins University

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Computer Science and Engineering

Sixth Semester BE - Scheme and Syllabus

Sl. No	Course Code	Course Name	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15CST61	Unix System Programming	CS	3-0-0-0	3	100
2.	15CST62	System Software	CS	3-0-0-0	3	100
3.	15CSI63	Embedded Systems (IC)	CS	3-0-2-0	4	100
4.	15CSI64X	Foundation Elective-VI (IC)	CS	3-0-2-0	4	100
5.	15CST65X	Engineering Elective-VII	CS	3-0-0-0	3	100
6.	15HOE66X	Open Elective –VIII	CS/BS&H	2-0-0-4	3	100
7.	15CSL67	Unix System Programming Laboratory	CS	1-0-2-0	2	100
8.	15CSH68	Technical Aptitude and Group Discussion	CS/BS&H	1-0-2-0	2	100
9.	15CSP69	Mini Project and Seminar	CS	1-0-2-0	2	100
		Total		**20-0-10-4**	**26**	**900**

	Foundation Elective-VI (IC)	
Sl. No	Course Code	Course Name
1	15CSI641	Data Mining (IC)
2	15CSI642	Database Concepts (IC)
3	15CSI643	Soft Computing (IC)

	Engineering Elective-VII	
Sl. No	Course Code	Course Name
1	15CST651	Artificial Intelligence
2	15CST652	Network Security (MOOCS)
3	15CST653	Operations Analytics (Certificate Course)Wharton University of Business

	Open Elective –VIII	
Sl. No	Course Code	Course Name
1	15HOE661	Lab View – Level 1
2	15HOE662	Yoga & Martial Arts
3	15HOE663	Music (Carnatic /Instrumental)/Dance/Sports
4	15HOE664	Online certification courses from IITs / IISC / SWAYAM / EDX

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Computer Science and Engineering
Seventh Semester BE – Scheme and Syllabus

Sl. No.	Course Code	Course Name	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15CSI71	Internet of Things (IoT) (IC)	CS	3-0-2-0	4	100
2.	15CST72	Android Application Development	CS	2-0-0-0	2	100
3.	15CSI73X	Foundation Elective-IX (IC)	CS	3-0-2-0	4	100
4.	15CST74X	Engineering Elective-X	CS	3-0-0-0	3	100
5.	15HOE75X	Open Elective-XI	CS/BS&H/ME	2-0-0-4	3	100
6.	15HOE76X	Open Elective-XII	CS/BS&H	2-0-0-4	3	100
7.	15CSL77	*Information and Network Security Laboratory*	CS	1-0-2-0	2	100
8.	15CSL78	Android Application Development laboratory	CS	1-0-2-0	2	100
9.	15CSP79	Project Phase I & Seminar	CS	0-0-6-0	3	100
		Total		17-0-14-8	26	900

	Foundation Elective-IX (IC)	
Sl. No.	**Course Code**	**Course Name**
1	15CSI731	Object Oriented Modeling and Designing(IC)
2	15CSI732	Big Data (IC)
3	15CSI733	Web Technologies – Servlet, JSP (IC)

	Engineering Elective-X	
Sl. No.	**Course Code**	**Course Name**
1	15CST741	System Modeling and Simulation
2	15CST742	C# and .Net (MOOCS)
3	15CST743	Managing Big Data with MySQL(Certificate Course) Duke University

	Open Elective-XI	
Sl. No.	**Course Code**	**Course Name**
1	15HOE751	Tax Management
2	15HOE752	Assessment of Building Energy Performance (Offered by ASHRAE)
3	15HOE753	National Disaster Management & Mitigation
4	15HOE754	Certification Course (Online)

	Open Elective-XII	
Sl. No.	**Course Code**	**Course Name**
1	15HOE761	Small & Medium Enterprise Management
2	15HOE762	Occupational Safety & Health Administration
3	15HOE763	Animation & Multimedia Engineering
4	15HOE764	Certification Course (Online)

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Computer Science and Engineering
Eighth Semester BE – Scheme and Syllabus

Sl. No.	Course Code	Course Name	Teaching Dept.	Total Credits	Marks
1.	15CSP81	Project Phase II	CS	4	100
2.	15CSP82	Project Phase III	CS	4	100
3.	15CSP83	Evaluation and Viva voce (External)	CS	10	100
		Total		**18**	**300**

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Information Science and Engineering

Fifth Semester BE – Scheme

Sl. No	Course Code	Course	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15IST51	Computer Networks	IS	3-0-0-0	3	100
2.	15IST52	Microcontrollers	IS	3-0-0-0	3	100
3.	15ISI53	Operating System (IC)	IS	3-0-2-0	4	100
4.	15IST54	Software Engineering and Testing	IS	3-0-0-0	3	100
5.	15ISI55X	Foundation Elective-IV(IC)	IS	3-0-2-0	4	100
6.	15IST56 X	Engineering Elective-V	IS	3-0-0-0	3	100
7.	15ISL57	Computer Networks Laboratory	IS	1-0-2-0	2	100
8.	15ISL58	Microcontroller Laboratory	IS	1-0-2-0	2	100
9.	15ISH59	General Aptitude	IS/BS&H	1-0-2-0	2	100
		Total		**21-0-10-0**	**26**	**900**

Elective-IV(Foundation Elective-IC)		
Sl. No	**Course Code**	**Course**
1	15ISI551	Advanced Algorithms
2	15ISI552	Object oriented Programming with Java
3	15ISI553	Compiler Design(NPTEL/MOOCS)

Elective-V (Engineering Elective)		
Sl. No	**Course Code**	**Course**
1	15IST561	Operations Research
2	15IST562	Object Oriented Modeling and Design
3	15IST563	Computer architecture (MOOCS)/ Information Security(MOOCS)

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Information Science and Engineering

Sixth Semester BE – Scheme

Sl. No	Course Code	Course	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15IST61	Unix System programming	IS	3-0-0-0	3	100
2.	15ISI62	Android Programming(IC)	IS	3-0-2-0	4	100
3.	15ISI63	Embedded System	IS	3-0-0-0	3	100
4.	15ISI64X	Foundation Elective-VI(IC)	IS	3-0-2-0	4	100
5.	15IST65X	Engineering Elective-VII	IS	3-0-0-0	3	100
6.	15HOE66X	Open Elective –VIII	IS/BS&H	2-0-0-4	3	100
7.	15ISL67	Unix System programming Laboratory	IS	1-0-2-0	2	100
8.	15ISH68	Technical Aptitude & GD	IS/BS&H	1-0-2-0	2	100
9.	15ISP69	Mini project & Seminar	IS	1-0-2-0	2	100
		Total		**20-0-10-4**	**26**	**900**

Elective – VI(Foundation Elective-IC)		
Sl. No	Course Code	Course
1	15ISI641	Distributed Computing System
2	15ISI642	Database Concepts
3	15ISI643	Computer Graphics and Multimedia Programming

Elective – VII (Engineering Elective)		
Sl. No	Course Code	Course
1	15IST651	Data Mining
2	15IST652	Artificial Intelligence
3	15IST653	Introduction to CSS3(MOOCS)

Group A Elective – VIII (Open Elective)		
Sl. No	Course Code	Course
1	15HOE661	Lab View – Level 1
2	15HOE662	Yoga & Martial Arts
3	15HOE663	Music (Carnatic/ Instrumental)/Dance/Sports
4	15HOE664	Online certification courses from IITs / IISC / SWAYAM / EDX

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Information Science and Engineering
Seventh Semester BE – Scheme

Sl. No	Course Code	Course	Teaching Dept.	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15IST71	Internet of Things	IS	3-0-0-0	3	100
2.	15IST72	Image Processing	IS	3-0-0-0	3	100
3.	15ISI73X	Foundation Elective-IX(IC)	IS	3-0-2-0	4	100
4.	15IST74X	Engineering Elective-X	IS	3-0-0-0	3	100
5.	15HOE75 X	Open Elective-XI	IS/BS&H/ME	2-0-0-4	3	100
6.	15HOE76 X	Open Elective-XII	IS/BS&H	2-0-0-4	3	100
7.	15ISL77	Internet of Things Laboratory	IS	1-0-2-0	2	100
8.	15ISL78	Image processing Laboratory	IS	1-0-2-0	2	100
9.	15ISP79	Project Phase-I & Seminar	IS	0-0-6-0	3	100
		Total		18-0-6-8	26	900

Elective – IX (Foundation Elective- IC)		
Sl. No	Course Code	Course
1	15ISI731	Soft Computing
2	15ISI732	Big Data
3	15ISI733	Web Technologies – Servlet, JSP

Elective – X (Engineering Elective)		
Sl. No	Course Code	Course
1	15IST741	System Simulation and Modeling
2	15IST742	Machine Learning (NPTEL/MOOCS)
4	15IST743	Project Planning and Control(MOOCS)

Group B Elective – XI (Open Elective)		
Sl. No	Course Code	Course
1	15HOE751	Tax Management
2	15HOE752	Assessment of Building Energy Performance (Offered by ASHRAE)
3	15HOE753	National Disaster Management & Mitigation
4	15HOE754	Online certification courses from IITs / IISC / SWAYAM / EDX

Group C Elective – XII (Open Elective)		
Sl. No	Course Code	Course
1	15HOE761	Small & Medium Enterprise Management
2	15HOE762	Occupational Safety & Health Administration
3	15HOE763	Animation & Multimedia Engineering
4	15HOE764	Online certification courses from IITs / IISC / SWAYAM / EDX

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Computer Science and Engineering

Eighth Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept.	Total Credits	Marks
1.	15ISP81	Project Phase II	IS	4	100
2.	15ISP82	Project Phase III	IS	4	100
3.	15ISP83	Evaluation and Viva voce (External)	IS	10	100
		Total		**18**	**300**

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Mechanical Engineering

Fifth Semester BE-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15MET51	Machine Design-I	ME	3-0-0-0	3	100
2	15MEI52	Dynamics of Machines(IC)	ME	3-0-2-0	4	100
3	15MET53	Artificial Intelligence And Robotics	ME	3-0-0-0	3	100
4	15MEI54	Fluid Mechanics(IC)	ME	3-0-2-0	4	100
5	15MET55X	Foundation Elective-IV	ME	3-0-0-0	3	100
6	15MET56X	Engineering Elective-V	ME	3-0-0-0	3	100
7	15MEL57	Energy Conversion Laboratory	ME	1-0-2-0	2	100
8	15MEL58	Robotics Laboratory	ME	1-0-2-0	2	100
9	15MEH59	General Aptitude	ME/ BS&H	1-0-2-0	2	100
		Total		21-0-10-0	26	900

	Foundation Elective-IV	
Sl. No	Subject Code	Subject
1	15MET551	Composite Material Technology
2	15MET552	Power Plant Engineering
3	15MET553	HVAC-I

	Engineering Elective-V	
Sl. No	Subject Code	Subject
1	15MET561	Metal Forming Process
2	15MET562	Mechatronics
3	15MET563	Economics of Engineering

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Mechanical Engineering

Sixth Semester BE-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15MET61	Machine Design-II	ME	3-0-0-0	3	100
2	15MEI62	Computer Integrated Manufacturing(IC)	ME	3-0-2-0	4	100
3	15MEI63	Finite Element Methods(IC)	ME	3-0-2-0	4	100
4	15MET64X	Foundation Elective –VI	ME	3-0-0-0	3	100
5	15MET65X	Engineering Elective –VII	ME	3-0-0-0	3	100
6	15HOE66X	Open Elective-VIII	ME/ BS&H	2-0-0-4	3	100
7	15MEL67	Fluid Machinery Laboratory	ME	1-0-2-0	2	100
8	15MEP68	Mini Project + Seminar	ME	1-0-2-0	2	100
9	15MEH69	Technical Aptitude and Group Discussion	ME/ BS&H	1-0-2-0	2	100
		Total		21-0-10-0	26	900

Foundation Elective-VI		
Sl. No	Subject Code	Subject
1	15MET641	Non-Conventional Machining
2	15MET642	Turbomachines
3	15MET643	HVAC-II

Engineering Elective-VII		
Sl. No	Subject Code	Subject
1	15MET651	Refrigeration and Air Conditioning
2	15MET652	Operations Research
3	15MET653	Wind Energy Engineering

Open Elective-VIII		
Sl. No	Subject Code	Subject
1	15HOE661	Lab View – Level 1
2	15HOE662	Yoga & Marshal Arts
3	15HOE663	Music (Carnatic / Hindustani / Instrumental) / Dance / Sports
4	15HOE664	Online Certification Program – MOOCS/NPTEL/IIT/EDX/Course Era certification. Equivalent to 36 – 40 hours approved by Department

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NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Mechanical Engineering
Seventh Semester BE-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15MEI71	Mechanical Vibrations (IC)	ME	3-0-2-0	4	100
2	15MET72	Heat and Mass Transfer	ME	3-0-0-0	3	100
3	15MET73X	Foundation Elective-IX	ME	3-0-0-0	3	100
4	15MET74X	Engineering Elective-X	ME	3-0-0-0	3	100
5	15HOE75X	Open Elective-XI	ME/BS&H	2-0-0-4	3	100
6	15HOE76X	Open Elective-XII	ME/BS&H	2-0-0-4	3	100
7	15MEL77	Computer Aided Modelling & Analysis Laboratory	ME	1-0-2-0	2	100
8	15MEL78	Heat and Mass Transfer Laboratory	ME	1-0-2-0	2	100
9	15MEP79	Project Phase I & Seminar	ME	1-0-4-0	3	100
		Total		**19-0-10-8**	**26**	**900**

		Foundation Elective-IX
Sl. No	Subject Code	Subject
1	15MET731	Engineering Management& Entrepreneurship
2	15MET732	Hydraulics and Pneumatics
3	15MET733	HVAC-III

		Engineering Elective-X
Sl. No	Subject Code	Subject
1	15MET741	Safety, Security & Building Management Systems
2	15MET742	Foundry Technology
3	15MET743	Biomass Energy Systems

		Open Elective-XI
Sl. No	Subject Code	Subject
1	15HOE751	Tax Management
2	15HOE752	Assessment of Building Energy Performance
3	15HOE753	National Disaster Management & Mitigation
4	15HOE754	Online Certification Program – MOOCS/NPTEL/IIT/EDX/Course Era certification. Equivalent to 36 – 40 hours approved by Department

		Open Elective-XII
Sl. No	Subject Code	Subject
1	15HOE761	Small & Medium Enterprise Management
2	15HOE762	Occupational Safety & Health Administration
3	15HOE763	Animation & Multimedia Engineering
4	15HOE764	Online Certification Program – MOOCS/NPTEL/IIT/EDX/Course Era certification. Equivalent to 36 – 40 hours approved by Department

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Mechanical Engineering

Eighth Semester BE-Scheme

Sl. No	Subject Code	Subject	Teaching Dept	Total Credits	Marks
1	15MEP81	Project – Phase II	ME	4	100
2	15MEP82	Project – Phase III	ME	4	100
3	15MEP83	Evaluation and Viva-Voce(External)	ME	10	100
		Total		18	300

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Civil Engineering

Fifth Semester B.E. – Scheme

Sl. No	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15CVI51	Transportation Engineering (IC)	CV	3-0-2-0	4	100
2	15CVT52	Structural Analysis - II	CV	3-0-0-0	3	100
3	15CVI53	Design of RCC Structural Elements (IC)	CV	3-0-2-0	4	100
4	15CVT54X	Foundation Elective – IV	CV	3-0-0-0	3	100
5	15CVT55X	Foundation Elective – V	CV	3-0-0-0	3	100
6	15CVT56X	Engineering Elective – VI	CV	3-0-0-0	3	100
7	15CVL57	Fluid Mechanics Lab	CV	1-0-2-0	2	100
8	15CVL58	Design and Analysis Lab- I	CV	1-0-2-0	2	100
9	15CVH59	General Aptitude	CV/BS&H	1:0:2:0	2	100
		Total		21-0-10-0	26	900

Foundation Elective – IV		
Sl. No	Course Code	Course
1	15CVT541	Construction Industry practices - I
2	15CVT542	Advanced Fluid Mechanics
3	15CVT543	Traffic Engineering

Foundation Elective – V		
Sl. No	Course Code	Course
1	15CVT551	Advanced Surveying
2	15CVT552	Construction Management and Engineering Economics
3	15CVT553	Online certification courses from IITs / IISC / SWAYAM / EDX

Engineering Elective – VI		
Sl. No	Course Code	Course
1	15CVT561	Green Buildings
2	15CVT562	Building Services
3	15CVT563	Hydrology & Irrigation Engineering

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Civil Engineering

Sixth Semester B.E. - Scheme

Sl. No	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15CVI61	Design of Steel Structures (IC)	CV	3-0-2-0	4	100
2	15CVT62	Geotechnical Engineering - I	CV	3-0-0-0	3	100
3	15CVI63	Environmental Engineering (IC)	CV	3-0-2-0	4	100
4	15CVT64X	Foundation Elective – VII	CV	3-0-0-0	3	100
5	15CVT65X	Engineering Elective – VIII	CV	3-0-0-0	3	100
6	15HOE66X	Open Elective – IX	CV/BS&H	2-0-0-4	3	100
7	15CVL67	Detailing of Structural Elements Lab	CV	1-0-2-0	2	100
8	15CVL68	Extensive Survey Camp	CV	1-0-2-0	2	100
9	15CVH69	Technical Aptitude and GD	CV/BS&H	1-0-2-0	2	100
		Total		20-0-10-4	26	900

Foundation Elective – VII		
Sl. No	Course Code	Course
1.	15CVT641	Construction Industry practices - II
2.	15CVT642	Advanced Transportation Engineering
3.	15CVT643	Earthquake Resistant Design of Structures

Engineering Elective – VIII		
Sl. No	Course Code	Course
1	15CVT651	Pollution Control and Management
2	15CVT652	Water Resources Engineering
3	15CVT653	Pavement Materials and Construction

Open Elective – IX		
Sl. No	Course Code	Course
1	15HOE661	Lab View – Level 1
2	15HOE662	Yoga & Martial Arts
3	15HOE663	Music (Carnatic / Instrumental) / Dance / Sports
4	15HOE664	Online certification courses from IITs / IISC / SWAYAM / EDX

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)
Department of Civil Engineering
Seventh Semester B. E. – Scheme

Sl. No	Course Code	Course	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1	15CVT71	Geotechnical Engineering - II (IC)	CV	3-0-2-0	4	100
2	15CVT72	Estimation and Valuation (IC)	CV	3-0-2-0	4	100
3	15CVT73X	Foundation Elective – X	CV	3-0-0-0	3	100
4	15CVT74X	Engineering Elective – XI	CV	3-0-0-0	3	100
5	15HOE75X	Open Elective – XII	CV/BS&H/ME	2-0-0-4	3	100
6	15HOE76X	Open Elective – XIII	CV/BS&H	2-0-0-4	3	100
7	15CVL77	Project Management Lab	CV	0-0-2-0	1	100
8	15CVL78	Analysis And Design Lab – II	CV	1-0-2-0	2	100
9	15CVP79	Project Evaluation – I	CV	1-0-4-0	3	100
	Total			18-0-12-8	26	900

Foundation Elective – X		
Sl. No	Course Code	Course
1	15CVT731	Engineering Construction industry practices-III
2	15CVT732	Pre Stressed Concrete Structures
3	15CVT733	Pavement Design

Engineering Elective – XI		
Sl. No	Course Code	Course
1	15CVT741	Fire safety and management
2	15CVT742	Fundamentals of Energy, Environment and climate change
3	15CVT743	Industrial Waste water Treatment

Open Elective – XII		
Sl. No	Course Code	Course
1	15HOE751	Tax Management
2	15HOE752	Assessment of Building Energy Performance (Offered by ASHRAE)
3	15HOE753	Natural Disaster Mitigation and Management
4	15HOE754	Online certification courses from IITs / IISC / SWAYAM / EDX

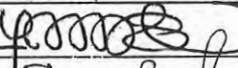| Open Elective – XIII		
Sl. No	Course Code	Course
1	15HOE761	Small & Medium Enterprise Management
2	15HOE762	Occupational Safety & Health Administration
3	15HOE763	Animation & Multimedia Engineering
4	15HOE764	Online certification courses from IITs / IISC / SWAYAM / EDX

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous College under VTU)

Eighth Semester BE – Scheme

Sl. No.	Course Code	Course Name	Teaching Dept.	Total Credits	Marks
4.	15CVP81	Project Phase II	CV	4	100
5.	15CVP82	Project Phase III	CV	4	100
6.	15CVP83	Evaluation and Viva voce (External)	CV	10	100
		Total		**18**	**300**

ANNEXURE II

Modification in Syllabus for Second Year programmes

Syllabus of 3rd and 4th Semester

Proposed modifications of topics in the Engineering Mathematics

Module	Existing	Proposed
3	**15CSM41/15ISM41** **Information Theory and Coding:** Introduction, Entropy, Joint Entropy and Conditional Entropy, Relative Entropy and Mutual Information, Relationship Between Entropy and Mutual Information, Chain Rules for Entropy, Relative Entropy and Mutual Information, Jensen's Inequality andits Consequences, Log Sum Inequality andits Applications, Data-Processing Inequality, Sufficient Statistics, Fano's Inequality.	**17CSM41/ 17ISM41** **Fourier and Z-Transform:** Infinite Fourier Transform, Fourier Sine and Cosine Transform and their inverse transforms-Problems. **Z-Transforms**-Definition, standard functions, statements of Linearity property, Damping and shifting rules-problems. Inverse Z-Transforms by partial fraction method. Difference equations– solutions by Z-transform
4	**15CSM41/15ISM41** **Sampling:** Sampling and inference: Sampling distribution, testing of hypothesis, level of significance, confidence limits. Test of significance of large samples, sampling of variables, central limit theorem, confidence limits for unknown means, studentst-distribution. **Queuing Theory:** Terminology of Queuing system, Queuing models, Simulation.	**17CSM41/ 17ISM41** Complex variables: Functions of a complex variable, derivative of complex functions. Analytic functions: Cauchy's-Riemann equations in Cartesian and polar forms (No problems by using limits), Harmonic functions, construction of analytic functions by using Milne-Thomson method. Cauchy Theorem, Cauchy's integral formula-problems.
5	**15CSM31/15ISM31 & 15CVM31, 15ECM31 ,15MEM31** MATLAB	**17CSM31/17ISM31 & 17CVM31, 17ECM31 ,17MEM31** SCILAB

Proposed modifications of topics in the Civil Engineering

	Existing	Replaced
Foundation Elective - II	Air Pollution and Control	Elements of Construction Industry
	Remote Sensing and GIS	Online Certification Course, IIRS- ISRO certification. Equivalent to 36-40 hours approved by Department
Engineering Elective – III	Object Oriented Programming with C++	Environmental Air Pollution
	Management Information Systems	Remote Sensing and GIS

Proposed modifications of topics in the Computer Science & Engineering

	Existing Scheme of 3rd Sem. (2016-2017)			Updated Scheme of 3rd Sem. (2017-2018)		
Sl. No.	Course Code	Course	Total Credits	Course Code	Course	Total Credits
1.	15CSM31	Engineering Mathematics-III (IC)	4	17CSM31	Engineering Mathematics-III (IC)	4
2.	15CST32	Fundamentals of Computation Engineering	3	17CST32	Fundamentals of Computation Engineering	4
3.	15CSI33	Data Structures with C (IC)	5	17CSI33	Data Structure with C (IC)	4
4.	15CST34	Analog and Digital Electronics	3	17CST34	Analog and Digital Electronics	3
5.	15CST35	Computer Organization	3	17CST35	Computer Organization	3
6.	15CSI36X	Foundation Elective-I (IC)	3	17CSI36X	Foundation Elective -I (IC)	3
7.	15CSL37	Analog and Digital Electronics Laboratory	2	17CSL37	Analog and Digital Electronics Laboratory	2
8.	15CSI38	Virtualization Foundations (IC)	2	17CSI38	Virtualization Foundation (IC)	2
9.	15CSH39	Soft Skills Development	1	17CSH39	Soft Skills Development	1

	Foundation Elective-I (IC)		Foundation Elective-I (IC)	
Sl. No.	Course Code	Course	Course Code	Course
1.	15CSI361	Computer Communication and Networking	17CSI361	Computer Communication and Networking
2.	15CSI362	Creating Interactive and Responsive Web pages	17CSI362	Creating Interactive and Responsive Web pages
3.	15CSI363	Principles of Programming	17CSI363	Principles of Programming

Proposed modifications of topics in the Information Science & Engineering

Module	Existing	Proposed
1	**Set Theory:** Sets and Subsets, Set Operations and the Laws of Set Theory, Counting and Venn Diagrams. **Fundamentals of Logic:** Basic Connectives and Truth Tables, Logic Equivalence – The Laws of Logic.	**Set Theory:** Sets and Subsets, Set Operations and the Laws of Set Theory, Counting and Venn Diagrams. **Fundamentals of Logic:** Basic Connectives and Truth Tables, Logic Equivalence – The Laws of logic, Logical Implication.
2	**Fundamentals of Logic contd.:** Logical Implication – Rules of Inference, The Use of Quantifiers, Quantifiers, Definitions and the Proofs of Theorems.	**Fundamentals of Logic (Contd):** Rules of Inference, Quantifiers, Definitions and Proofs of Theorems. **Relations:** Cartesian Products and Relations, Properties of relations, Equivalence and Partial order relations.

| 3 | **Relations and Functions:** Cartesian Products and Relations, Functions –Plain and One-to-One, Onto Functions –Special Functions, The Pigeon-hole Principle, Function Composition and Inverse Functions. Properties of Relations, Computer Recognition – Zero-One Matrices and Directed Graphs, Partial Orders – Hasse Diagrams, Equivalence Relations and Partitions | **Relations (Contd):** Relations as matrices and graphs, Posets and Hasse diagrams. **Functions:,** Functions –Plain and One-to-One, Onto Functions –Special Functions, Pigeon-hole Principle, Function Composition and Inverse Functions. |

ANNEXURE III

List of Open Electives

Group 'A'	Group 'B'	Group 'C'
Lab View – Level 1	Tax Management	Small & Medium Enterprise Management
Yoga & Meditation / Martial Arts	Assessment of Building Energy Performance (Offered by ASHRAE)	Occupational Safety & Health Administration
Music (Carnatic/ Instrumental) /Dance /Sports)	National Disaster Management& Mitigation	Animation & Multimedia Engineering
Certification Course (Online)	Certification Course (Online)	Certification Course (Online)

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NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU

An Autonomous Institute under VTU, Belgaum

NAGARJUNA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Proceedings of the Academic Council Meeting-2 held on 28.05.2016

The Academic Council Meeting-2 was held on 28.05.2016, at 11.00am in Chamber of the Principal.

The agenda for the meeting were as follows:

1. Condolence for the sad demise of Dr. K. R. Anand Kumar
2. Review of the minutes of the previous meeting.
3. Approval of modification in Syllabus for First Year programmes
4. Approval of Scheme and Syllabus for Second year programmes
5. Approval of Amendments for Regulations
6. Result Analysis.
7. NAAC Peer Team visit
8. 2(f) Recognition
9. ISO Certifications
10. 2nd Rank in M.Tech
11. Kho-Kho Inter – Zonal Tournament
12. MOUs with different Industries
13. Any other matter with the permission of the Chair.

The members present:

1.	Dr. S G Gopala Krishna, Principal	Chairman
2.	Mr. Rajesh Nambiar, Head Vmware IT Academy, Asia Pacific and Japan (APJ) region	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
3.	Mr. Madhukar, Director, Climatics, Bengaluru	
4.	Dr. T V Govindaraju, Principal, KSIT, Bengaluru	Nominees of University (VTU)
5.	Dr. Chaitanya Kumar M V, Principal, HKBK College of Engg, Bengaluru	

6.	Dr. P Harisha, Basic Science	Teachers representing different level of teaching staff
7.	Dr. Rajendra S, Civil Engg	
8.	Dr. T M Mohan Kumar, Civil Engg	Member
9.	Dr. Nagesh K N, ECE	Member
10.	Dr. Shantakumar B Patil, CSE	Member
11.	Prof. B Roopashri Tantri, ISE	Member
12.	Dr. N Kapilan, ME	Member
13.	Dr. Gururaj M	Member Secretary

Members Absent:

1.	Dr. V Ramachandra, Vice President Ultra Tech Cements	Experts from outside the college representing areas such as Alumni, Industry, R&D, Technical Education
2.	Mr. Nitin Awasthi, Vice President Technical APSIS Solutions, Bengaluru	
3.	Dr. N G S Udupa, Mechanical Engg	Member
4.	Dr. N Sandhya, MBA	Member

Minutes of the Meeting:

Dr. S.G.Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Chairman, Academic Council welcomed all the members to the meeting.

1. **Condolence for the sad demise of Dr. K. R. Anand Kumar:**

The Academic Council expressed its condolence for the sad demise of Dr. K.R. Anand Kumar, who was the VTU nominee for the Council. The Chairman had given brief introduction about Dr. Anand Kumar and remembered his contribution towards the implementation of autonomous activities in the college. The Academic Council observed one minute silence.

2. **Review of the minutes of the previous meeting.**

a) **Approval of Rules and Regulations of the Autonomous programmes**
b) **Approval of Scheme & Syllabi**

The Chairman informed the members that Rules & Regulations, scheme and syllabi pertaining to the autonomous programmes which were framed and approved in the previous meeting have been implemented.
This information has been uploaded in the college website and also Hand books containing the approved rules and regulations, scheme and syllabi have been printed and distributed to the students.

3. Approval of modification in Syllabus for First Year programmes:

The Chairman in his presentation explained the necessity for change in the syllabus of first year for the autonomous progrmmes and also briefed about the small changes in the syllabus to the council members.

The Academic Council approved the modifications and the approved modified syllabus is provided in the Annexure-I.

4. Approval of Scheme and Syllabus for Second year programmes

Chairman explained the Scheme for the III and IV semester UG and PG programmes.

Dr. Chaitanaya Kumar expressed that the scheme should contain core courses with 04 credits and more practical components.

Dr.T.V.Govindaraju suggested to have uniform number of core courses from III to VII semesters and also told to have four core & two electives in each semester.

Dr. Chaitanaya Kumar suggested to include subjects like technical discussion and report writing under humanities department.

Chairman explained about the mapping of COs and POs.

Mr. Madhukar told that humanities courses to be included from III to VI and Principal explained that humanities courses are offered as per the UGC regulations.

The Academic Council resolved to approve the Scheme and Syllabus for Second year programmes. The approved Scheme and Syllabus is provided in the Annexure-II.

5. Approval of Amendments for Regulations

The chairman explained the modified rules with respect to point number 7 in the rules and regulation hand book.

The Academic Council resolved to approve amendment to the regulations. The approved amended regulations are provided in the Annexure-III.

6. Result Analysis:

Chairman briefed the result of the First Semester Autonomous Programme. Members were happy with the results. The Result analysis is provided in Annexure – IV.

7. NAAC Peer Team visit:

Chairman informed to the council that the Peer committee of National Assessment and Accreditation Council had visited the college during 5-7 May 2016 for the assessment and accreditation.

He also informed that the college is accredited with 'A' grade by NAAC.

All council members congratulated the Management, Principal and all staff members for achieving this success.

8. 2(f) Recognition:

Chairman informed to the council that college has been recognized under section 2(f) of UGC Act 1956.

9. ISO Certifications:

The members were informed that college had been ISO certified with ISO 9001:2008, ISO 14001:2004 and ISO 22000:2005.

10. 2nd Rank in M.Tech:

The members were informed that Ms. Chaitra D M (USN 1NC13CSE02) student of M.Tech Structural Engineering had secured 2nd Rank in university examinations.

All council members congratulated Ms. Chaitra D M and civil engineering department for achieving this success.

11. Kho-Kho Inter – Zonal Tournament:

The council was informed that, the college had organized VTU Inter Zonal and Zonal Kho-Kho tournament from 9th to 13th March 2016.

He had given the following details about the tournament:

VTU North Zone Kho – Kho Tournament:
Total - 9 Teams
Winner: Acharya Institute of Technology, Bengaluru
Runner: Nagarjuna College of Engineering and Technology, Bengaluru

VTU Inter Zonal Kho – Kho Tournament
Total - 13 Teams
Winner: Alva's Institute of Engineering & Technology, Moodbidri
Runner: Siddaganga Institute of Technology, Tumkur

12. MOUs with different Industries:

Chairman briefed about the MOUs with various industries and also the impact of those MOUs.

13. Any other matter with the permission of the Chair.

As there was no other matter to discuss, the chairman thanked the members for their valuable suggestions and solicited their co-operation in all future activities of the institution

OGY

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
(An Autonomous College under Visvesvaraya Technological University)

ge will be

· valuable
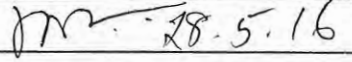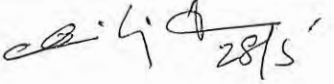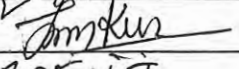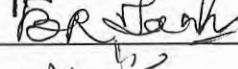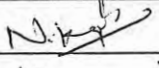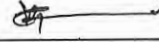
Academic Council Meeting # 2   28.05.2016

Sl. No.	Name	Signature
1.	Dr. S G Gopala Krishna - Principal	28.5.16
2	Dr. V Ramachandra, Vice President Ultra Tech Cements	ABSENT.
3	Mr. Rajesh Nambiar, Head Vmware IT Academy, Asia Pacific and Japan (APJ) region.	
4	Mr. Nitin Awasthi Vice President Technical APSIS Solutions, Bengaluru	ABSENT
5	Mr. Madhukar, Director, Swathi Air-conditioner System, Bengaluru	
6.	Dr. T V Govindaraju, Principal, KSIT, Bengaluru	28.5.16
7.	Dr. Chaitanya Kumar M V, Principal, HKBK College of Engg, Bengaluru	28/5
8.	Dr. N G S Udupa, Mechanical Engg	ABSENT
9.	Dr. P Harisha, Basic Science	P. Harisha.
10.	Dr. Rajendra S, Civil Engg	
11.	Dr. T M Mohan Kumar, Civil Engg	
12.	Dr. N Sandhya, MBA	ABSENT
13.	Dr. Nagesh K N, ECE	Nagesh 28/5/2016
14.	Dr. Shantakumar B Patil, CSE	28052016
15.	Prof. B Roopashri Tantri, ISE	BR 28/05/16
16.	Dr. N Kapilan, ME	
17.	Dr. Gururaj M, Member Secretary	28/5/16.

5.16

Nagarjuna College of Engineering and Technology, Bengaluru

Department of Information Science and Engineering
(Board of Studies)

Meeting No : BOS-02

Agenda :   30/01/2016

> ➢ To frame the syllabus for third and fourth semester B.E Programme.
> ➢ Any other matter regarding improvement in the syllabus

The following members have attended the meeting.

Sl. No.	Name	Signature
1.	Dr. Murulidhar N.N. (Subject expert from outside the college) NITK, Surathkal.	30/01/2016
2.	Dr. Shivanand Handigund.	30.01.201
3.	Prof. B. Roopashri Tantri.	BR Sach
4	Kishor P.G	
5.	Ashok. S. Patil	Gaur
6.	Sushmita Udupa	
7.	Shanmugapriya R	Priyas

The following members were absent with permission from chairman.
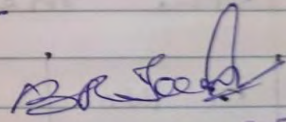
1. Dr. Niranjan Chiplunkar
2. Dr. K. G. Shrinivas
3. Mrs. Suma S.
4. Mrs. Priyadarshini R.
5. Dr. Gururaj M.

The meeting of Board Of Studies in Information Science & Engineering was convened on 30/01/2016 in Room No. CS 203. The following members were present in the meeting.

1. Prof. B. Roopashri Tantri (Chair person)
2. Dr. Murulidhar N. N., NITK, Surathkal (External subject expert)
3. Dr. Shuvanand M. Handigund (Member)
4. Mr. Ashok Patil (Member)
5. Mrs. Shanmugapriya R. (Member)
6. Mr. Kishore P. J. (Member)
7. Mrs. Sushmitha N. S. (Member)

Prof. B. Roopashri Tantri, Head of ISE department formally welcomed the members for the meeting. In her welcome speech, she appreciated the presence of Dr. Murulidhar N. N. from NITK, Surathkal (subject expert from outside the institution). She highlighted about the choice based credit system, which is incorporated in our curriculum. She also explained the scheme and structure to be incorporated in the department syllabi. She emphasized the need to incorporate the scheme and structure framed by the college authorities to maintain uniformity across the departments. The detailed syllabi of III and IV semester were presented before the committee for ratification.

Resolutions: The following suggestions were made during discussion.

1. The members studied in detail, the structure of the syllabus of 15IS32. It was found that the time frame fixed was not in accordance to the time frame required to teach appropriate depth level of the subject. Therefore the board approves the reorganization of the time frame.
2. The board studied the credit structure of the subject 15IS361. It was felt that the maturity level of the students may not be sufficient to grasp the subject at this level. At the same time, there was a necessity to place the state of the art "Python" language in some semester. Therefore, the board decides to carry forward this subject to higher semesters with one credit and the gap is filled with "Python Programming".
3. In the subject 15IS34, it was felt that the time frame required to teach the data structure "Queue" may not be sufficient to teach that maturity level of the students. Therefore, the time frame is reorganized.
4. The college has accepted to incorporate 36 credits for industry oriented subjects. The board felt that the industry needs training in various parts of the application. Therefore, it is felt that it is wise to introduce some more knowledge acquisition courses, which can be refined through industry oriented subjects, instead of directly industrial needy subjects.
5. The board ratifies the syllabi of third and fourth semesters of ISE department.

Date:05/02/2016

CIRCULAR

Board of Studies #02 Meeting of EC Department

We are happy to inform you that our college has been granted with autonomous status from VTU and Government of Karnataka from academic year 2015 -16. Board of studies (BOS) is formed for the syllabus framing & examination related activities of EC department.

Board of Studies #02 Meeting will be held with following details

      Date: 05/02/2016
      Time: 10.30 am
      Venue: EC HOD Chamber, NCET, Bangalore

Agenda: 1. Syllabus finalization for 3rd and 4th ~~year~~ Semester subjects to be handled by EC Department.
        2. Recommending examiners to academic counsel
        3. Finalizing course objectives & outcomes
        4. Any other matter with the permission of the chair

All members are requested to attend the meeting

Director 5/2/16

Derqeeh KN 5/2/2016
Dept. of HOD E&C Electronics & Communication
Nagarjuna College of Engg. & Technology
Venkatagirikote Post, Bangalore-562 110

Proceedings of the meeting

The second meeting of BOS (ECE) is held on 05.02.2016

1. The syllabus for 3rd sem and 4th sem BE & M. Tech syllabus are finalized and recommended to academic council for approval.
2. The BOS members have recommended to introduce new course Creating Interactive and Responsive Web Pages, Computer Communication and Networking courses in 3rd semester.
3. In 4rd sem and 4th sem syllabus integrated courses are network analysis and Signals & Systems, the lab equipments were finalized.
4. The BOS members have recommended to introduce new course Introduction to Programming using Python, Renewable Energy Resources, Object Oriented Programming using C++, Smart Materials and Management Information Systems courses in 4th semester
5. The members also have informed to have a Soft Skills Development program or a course in both the semesters.
6. Regarding the course objective and course outcomes; questions are to be framed both in CIE and SEE and has to be mapped to the course objectives.

External examiners from different colleges were nominated.
3rd sem subjects and 4th sem UG & PG.
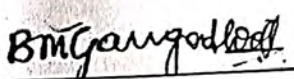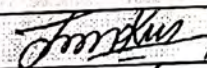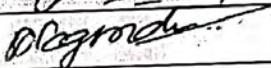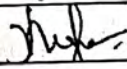
Sl. No.	Name & Designation	Designation
1.	H. M. Kotresh, Asst. Prof., East West Institute of Technology	Members
2.	Manjula. R. B, Asst, Prof. Reva ITM, Bangalore	Members
3.	J. B. Kalaiah, Asst, Prof. SJCIT, Chickballapur	Members
4.	Lokesh, Professor, RLJIT, Doddaballapur	Members
5.	Mohan Das, Assoc. Prof., Cambridge Institute of Technology	Members
6.	Nirmala, Asst. Prof., Reva ITM, Bangalore	Members
7.	Poornima G. R, Assoc. Prof., SVCE, Bangalore	Members
8.	Jenitha. A, assoc. Prof., East Point College of Engineering	Members

Board of Studies
Department of Electronics & Communication Engg

Attendance sheet

Sl. No.	Name & Designation	Designation	Signature
1	Dr.Nagesh. K. N – Prof. & Head	Chairperson	*signature* 5/2/2016
2	Mr. Basavaraj.G.M - Assc.Prof	Members	*signature* 5/02/16
3	Mrs. Sendamarai.P – Asst. Prof.	Members	*signature*
4	Mrs. G. Roopa - Asst.Prof	Members	G. Roopa 5/2/16
5	Mr. Yaseen Basha- Asst.Prof	Members	*signature*
6	Ms. Swetha. B. M- Asst.Prof	Members	*signature* 5/2/16
7	Mr. Ashoka. C. D- Asst.Prof	Members	Ashok
8	Dr.K. V. Suresh, Professor, SIT, Tumkur	Members	—
9	Dr. Manjunath.P, Professor, JNNCE, Shimoga	Members	—
10	Dr.Dinesh.P, Professor, Dayananda Sagar College of Engineering, Bangaluru	VTUNOMINEE Members	*signature* 5/2/16
11	Mr,Srinivas.M, Senior Engineer, Intel, Bangaluru	Members	—
12	Mr. Vijay Kumar Sajjanar, BLD Engg. College, Bijapur	Members	—

Meeting held on 13/06/2016

Members of the Board of Studies

Sl. No.	Name	Nomination of the Committee	Signature
1.	Dr. S Rajendra	Chairperson	
2.	Dr. B M Gangadarappa, Professor, JNNCE, Shivamogga	Member, VTU Nominee	BMGangadhar
3.	Dr. G R Manjunath, Professor & Head, Atria Institute of Technology, Bengaluru	Member, Subject Expert from outside	
4.	Mr. Amaranath S N Director, F E Designer	Member, Representative from Industry	
5.	Dr. T M Mohan Kumar	Member	
6.	Prof. Nagendra V	Member	
7.	Prof. Vijay K	Member	
8.	Mrs. Megha n Kulkarni	Member	

Proceedings of the BOS meeting

The BOS meeting held on 14th July 2016, in the Chamber of Chairman of BOS of Mechanical Engineering Department. Dr.N.Kapilan, Chairman, BOS of Mechanical Engineering welcomed the members of the BOS for the meeting.

Agenda:

1. Scheme and Syllabus for higher semester Mechanical Engineering Courses
2. Any other academic matter
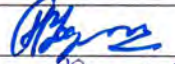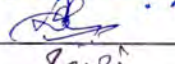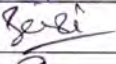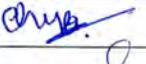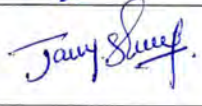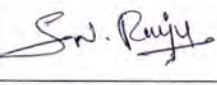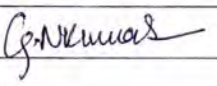
The chairman of the BOS explained the scheme suggested by the college and also the draft scheme and syllabus suggested by various stake holders such as alumni, employers, parents, faculty to the committee members. Also the scheme and syllabus of the various premier institutions such as NITK, Anna University, VIT, VTU, BMSCE and NMIT were discussed. The BOS members along with faculty members has gone through the syllabus drafted by the department of Mechanical Engineering and they insisted more elective subjects relevant to industrial applications like HVAC, NDT, Fire & safety, IMTA and Computer Aided Engineering softwares The BOS members appreciated the integrated courses such as Engineering Mathematics III and IV with MATLAB / SciLab and R-Lab components. The BOS members included one course from each mechanical engineering streams such as design, thermal and Manufacturing. The BOS members gone through the foundation courses offered in 3rd and 4th semester such as Automobile Engg - I, Engineering Metallurgy, Industrial Pollution Control, Automobile Engg – II, Advanced Material Science and Air Pollution Control. The BOS members appreciated the interdisciplinary courses offered in the engineering electives such as renewable energy sources, OOP using C++, MIS and smart materials. The BOS members were happy with the inclusion of 3D printing experiments in the Manufacturing Process Laboratory. The also scrutinized the experiments included in the 3rd and 4th semester laboratories and give approval.

The BOS members have given their approval for the scheme and syllabus of 3rd and 4th semester Mechanical Engineering. They suggested to invite suggestions from processional bodies to reduce the gap between industry and institute. They also suggested to include online courses offered by AICTE / NPTEL etc in the 5th or 6th semester. They meeting concluded with the vote of thanks by the chairman.

The following are the summary of the meeting

1. The syllabus and scheme of Mechanical Engineering Courses of 3rd and 4th semester were approved
2. The syllabus and scheme of Foundation Elective Courses and Engg Elective Courses were analyzed and approved
3. The syllabus and scheme of 3rd and 4th semester laboratory were scrutinized and approved
4. The BOS members suggested to take suggestions from professional societies and include industry relevant subject
5. Also they suggested to introduce online courses offered by AICTE and NPTEL.

BOS Members

S.No	Name	Designation	Signature
1	Dr.N.Kapilan	Chairman	
2	Dr. Shrishail Kakkeri	Member, VTU Nominee	
3	Dr. D.G. Kantharaju	Member	
4	Prof. Yogeesha H C	Member	
5	Mr.L.J. Naik	Member	
6	Mr. Shashikanth	Member	
7	Mr.Prashanth Kumar	Member	
8	Mr. Chethan Kumar N	Member	
9	Mr.Jayshankar	Engineer, Man Turbo Diesel Bengaluru.	
10	Mr. S N Raju	Director, Saptha Groups, Malleswaram,Bengaluru	
11	Dr.S.Kasturirengan	Professor, IISc, Bengaluru	
12	Dr.G.N.Kumar	Assoc. Prof, NITK, Surathkal	
13	Dr.Shailesh Rao	Professor & Head KS School of Engg & Management, Bengaluru.	

MINUTES OF MEETING- BOS 2016

Date: 18/02/2016
Time: 10.30 AM – 1.00 PM

Venue: MBA SEMINAR HALL

➤ **Agenda for the meeting was as follows:**

1. Autonomous Scheme and syllabus for III & IV Semesters of MBA
2. Any other related matters.

BOS Members 2016

Sl. No.	Category	Name	Affiliation	Attendance of the Members
1.	Chairman	Dr. Sandhya N	Professor & Head, MBA, NCET	Present
2.	Faculty Members	Mrs.Poornima U.K	Associate Professor, MBA, NCET, Bengaluru	Present
		Mr.AjathashatruSamal	Assistant Professor, MBA, NCET, Bengaluru	Present
		Mrs.Anandamma N	Assistant Professor, MBA, NCET, Bengaluru	Present
		Mr.Lokesh G R	Assistant Professor, MBA, NCET, Bengaluru	Present
		Mr.Harish K S	Assistant Professor, MBA, NCET, Bengaluru	Present
		Mr.Divya Kumar V	Assistant Professor, MBA, NCET, Bengaluru	Present
		Ms.Rajeshwari G.V.	Assistant Professor, MBA, NCET, Bengaluru	Present
3.	Expert nominee by Vice-Chancellor, VTU & Subject expert nominated by Academic Council	Dr. Raveendra	Professor, Department of MBA, AmbedkarInstitute of Technology, Bengaluru	Present
6.	Special Invitee	Dr. S. G. Gopala Krishna	Principal, NCET	Present

➤ **Proceedings of the meeting:**

Prof. Poornima U K, Associate Professor, Department of MBA, Member, Board of Studies, welcomed the BOS members and informed the audience about the need for conducting BOS meeting in the current year.

proposed Scheme of syllabus for theIII & IV Semesters of MBA(Autonomous Batch).

As it was for the first batch of Autonomous section of students, the Third and Fourth semester syllabus was framed, each aspect-Subject, code, L-T-P-S, Total Credits, marks, examination pattern etc were thoroughly discussed. The following Scheme of study was finalised. As electives were already offered in II semester, the same specialisation elective subjects were decided to be offered. The students need to choose three subjects out of five in each of the elective, amounting to implementing Choice Based Credit System

Scheme of Study - Third Semester – MBA

Sl. No	Subject Code	Subject	Teaching Dept	L-T-P-S (Hrs/week)	Total Credits	Marks
1.	15MBA31	Legal aspects of Business	MBA	3-0-1-0	4	100

NOTE: Dual Specialisation is offered to the students. Of the four streams of electives offered, two streams are chosen as a combination for dual specialization. The same combination of streams continues for Second and Third Semesters. In the Third semester, five electives are offered, of which **Three papers**are chosen by the student.

		I. HUMAN RESOURCE				
2.	15MBAHR311	International Human Resource Management	MBA	2-0-0-1	3	100
3.	15MBAHR312	Learning & development	MBA	2-0-0-1	3	100
4.	15MBAHR 313	Work place ethics	MBA	2-0-0-1	3	100
5.	15MBAHR314	Personal growth & Stress Management	MBA	2-0-0-1	3	100
6.	15MBAHR 315	Public relations, conflict & negotiation management	MBA	2-0-0-1	3	100
		II. MARKETING				
7.	15MBAMM321	Integrated marketing communications & Social Media marketing	MBA	2-0-0-1	3	100
8.	15MBAMM322	International marketing management	MBA	2-0-0-1	3	100
9.	15MBAMM323	Supply chain & logistics Management	MBA	2-0-0-1	3	100
10.	15MBAMM324	Strategic brand management	MBA	2-0-0-1	3	100
11.	15MBAMM325	Marketing research	MBA	2-0-0-1	3	100
		III. FINANCE				
12.	15MBAFM331	Management Accounting & control systems	MBA	2-0-0-1	3	100
13	15MBAFM332	Mergers & Acquisitions & corporate Restructuring	MBA	2-0-0-1	3	100
14	15MBAFM333	International Financial management	MBA	2-0-0-1	3	100
15	15MBAFM334	Tax Management	MBA	2-0-0-1	3	100
16	15MBAFM335	Futures & options	MBA	2-0-0-1	3	100

		IV. BANKING & INSURANCE				
17	15MBAB&I 341	Banking Technology Management	MBA	2-0-0-1	3	100
18	15MBAB&I 342	International Banking	MBA	2-0-0-1	3	100
19	15MBAB&I 343	Investment Banking & Financial Services	MBA	2-0-0-1	3	100
20	15MBAB&I 344	Treasury &Forex Management	MBA	2-0-0-1	3	100
21	15MBAB&I 345	Strategic Credit Management	MBA	2-0-0-1	3	100
22	15MBA32	Mini Project	MBA	0-0-0-4	4	100
	Total			24-2-2-24	26	800

L – Lecture   T-Tutorials   P-Practical   S – Self Study

CHANGES:

A MINI PROJECT (Total Credit – 4) was introduced to expose the students to the working of the organization/ company /industry or to take up an in-depth study of an issue / problem in the area of General Management/Any area of specialization

Scheme of Study -Fourth Semester – MBA

A Management Thesis (Project Work)(Total Credit – 14) was introduced for the fourth semester exclusively to be conducted for a period of 14 weeks.

TOTAL CREDITS

I SEM	II SEM	III SEM	IV SEM	TOTAL
28	32	26	14	100

HOD, MBA
Nagarjuna College of Engineering & Technology
Devanahalli (Tq), Bengalur (Dt) Pin - 562164

Academic Council Meeting # 3 Notice

We are happy to inform that the Academic Council meeting #03 of our college will be held as per the following schedule. We request you to attend the Meeting and give your valuable inputs.
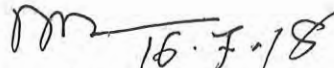
Date: 15/06/2017

Time: 11:00am

Venue: NCET, Bengaluru

Agenda:

1. Review of the minutes of the previous meeting.
2. Approval of Scheme and Syllabus for Third year & Fourth Year UG programmes
3. Approval of Open Electives and Certification Courses
4. Approval of amendment to the regulations
5. Result Analysis of First to Fourth Semester for the Academic year 2016-17.
6. Equivalent courses to be studied by Change of College Students
7. Visit of UGC team and conferment of Autonomous status
8. VTU LIC Visit
9. Major Academic Activities of the college
10. Active Nodal Centre recognition of Virtual Lab
11. Placement statistics for the year 2016-17
12. Project Grants and Funding
13. MOUs with different industries
14. Any other matter with the permission of the chair

Member Secretary

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Principal 8.6.17

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
(An Autonomous College under Visvesvaraya Technological University)

Academic Council Meeting # 3   15.06.2017

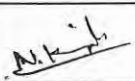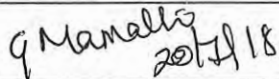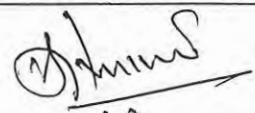| Sl. No.	Name	Signature
1.	Dr. S G Gopala Krishna, Principal	mn 15-6·17
2	Dr. V Ramachandra, Vice President Ultra Tech Cements	ABSENT
3	Mr. Rajesh Nambiar, Salesforce Academic Manager, Salesforce	
4	Mr. Nitin Awasthi Vice President- Technical, APSIS Solutions, Bengaluru	09/6/17
5	Mr. Madhukar, Director, Climatics, Bengaluru	ABSENT
6.	Dr. T V Govindaraju, Principal, KSIT, Bengaluru	15.6.17
7.	Dr. Chaitanya Kumar M V, Principal, HKBK College of Engg, Bengaluru	
8.	Dr. N G S Udupa, Mechanical Engg	NGSudupa 15.6.17
9.	Dr. P Harisha, Basic Science	P. Harisha
10.	Dr. Rajendra S, Civil Engg	15/6/17
11.	Dr. N Sandhya, COE	N.Sandhya
12.	Dr. Nagesh KN, ECE	Nagesh KN 15/6/2017
13.	Dr. Shantakumar B Patil, CSE	
14.	Dr. Dr. N Kapilan, ME	N.Kapil
15.	Mr. Ashok S Patil, ISE	
16.	Dr. Srikanta Murthy K, Vice Principal (Admn) & Prof. in CSE	

Academic Council Meeting # 4 Notice

18.09.2017

We are happy to inform that the Academic Council meeting #04 of our college will be held as per the following schedule. We request you to attend the Meeting and give your valuable inputs.

Date: 23/09/2017

Time: 12:30noon

Venue: NCET, Bengaluru

Agenda:

1. Approval of amendment to the regulations
2. Approval of Results of PG programmes.
3. Approval of Scheme and Syllabus of PG programmes
4. Any other matter with the permission of the chair

Member Secretary

18. 9. 17

Principal

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Sl. No.
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NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
(An Autonomous College under Visvesvaraya Technological University)
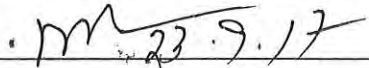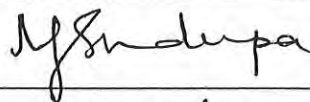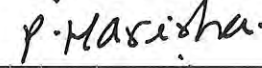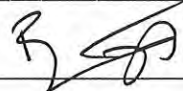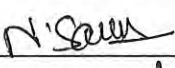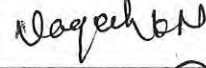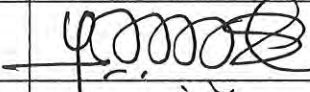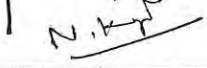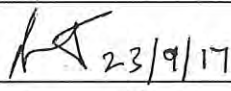
Academic Council Meeting # 4   23.09.2017

Sl. No.	Name	Signature
1.	Dr. S G Gopala Krishna, Principal	_(signed) 23.9.17_
2	Dr. V Ramachandra, Vice President Ultra Tech Cements	ABSENT
3	Mr. Rajesh Nambiar, Salesforce Program Manager, Salesforce	ABSENT
4	Mr. Nitin Awasthi Vice President- Technical, APSIS Solutions, Bengaluru	ABSENT
5	Mr. Madhukar, Director, Climatics, Bengaluru	ABSENT
6.	Dr. T V Govindaraju, Principal, KSIT, Bengaluru	_(signed)_
7.	Dr. Chaitanya Kumar M V, Principal, HKBK College of Engg, Bengaluru	_(signed)_
8.	Dr. N G S Udupa, Vice Principal (Admn) & Prof. in Mechanical Engg	_(signed)_
9.	Dr. P Harisha, Dean SW	_(signed) P·Harisha._
10.	Dr. Rajendra S, Civil Engg	_(signed)_
11.	Dr. N Sandhya, COE	_(signed)_
12.	Dr. Nagesh K N, ECE	_(signed) Nageshbh_
13.	Dr. Shantakumar B Patil, CSE	_(signed) 230920 A_
14.	Dr. Dr. N Kapilan, ME	_(signed)_
15.	Mr. Srivats R, MBA	_(signed) 23/9/17_
16.	Dr. Srikanta Murthy K, Vice Principal (Aca) & Prof. in CSE	_(signed)_

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under Visvesvaraya Technological University)

Academic Council Meeting # 5 Notice

16.07.2018

We are happy to inform that the Academic Council meeting #05 of our college will be held as per the following schedule. We request you to attend the meeting and give your valuable inputs.

Date: 20/07/2018

Time: 11.00 am

Venue: NCET, Bengaluru

Agenda:

1. Nomination of members to the Academic Council
2. NBA Accreditation
3. Approval of Scheme and Syllabus
4. Approval of amendment to the regulations
5. Reduction of Credits
6. Result Analysis for 2017-18
7. Project Funding
8. Project Exhibition
9. Graduation Day
10. Training & Placement
11. National Cyber Security Programme - NCSP
12. Any other matter with the permission of the chair
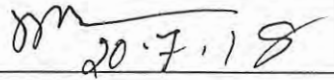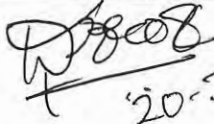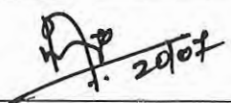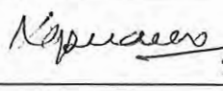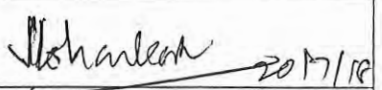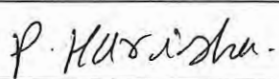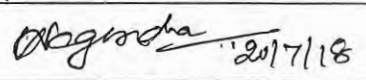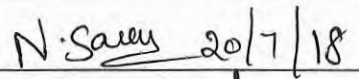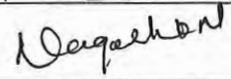
Member Secretary

Principal

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY
(An Autonomous College under Visvesvaraya Technological University)

Academic Council Meeting # 5   20.07.2018

Sl. No.	Name	Signature
1.	Dr. S G Gopala Krishna, Principal	_(signed)_ 20.7.18
2.	Dr. Nages h Poojary, Lead Technical Architect, Continental Technical Center, Bengaluru	ABSENT
3.	Mr. Dheerendra Madhusudhan, Chief Technology Officer, PthinkS, Bengaluru	_(signed)_ 20-JUL-2018
4.	Mr. R Anish Simha, Sr. General Manager, Rinac India Ltd, Bengaluru	ABSENT
5.	Mr. BK Ramesh, Managing Director, Zen Building Solutions Pvt., Ltd., Bengaluru	_(signed)_ 2007
6.	Dr. Nanjundaswamy C, Principal, Dr. Ambedkar Institute of Technology, Bengaluru	_(signed)_
7.	Dr. T Ananthapadmanabha, Principal, NIE Institute of Technology, Mysuru	_(signed)_ 20/7/18
8.	Dr. G N Mohan Babu, Principal, BMS Institute of Technology, Bengaluru	_(signed)_ 20 7/18
9.	Dr. K. Kumar, Dean (R&D), Prof. in Civil Engineering	ABSENT
10.	Dr. P Harisha, Dean SW	P. Harisha.
11.	Dr. Nagendra V, Civil Engg	_(signed)_ 20/7/18
12.	Dr. N Sandhya, COE	N.Sandy 20/7/18
13.	Dr. Nagesh K N, HOD-ECE	_(signed)_
14.	Dr. Dr. N Kapilan, HOD-ME	_(signed)_
15.	Dr. Mamatha G, HOD-IS	G Mamalli 20/7/18
16.	Dr. Srikanta Murthy K, Vice Principal (Aca) & HOD-CSE	_(signed)_

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under Visvesvaraya Technological University)

Academic Council Meeting # 6 Notice

08.08.2019

We are happy to inform that the Academic Council meeting #06 of our college will be held as per the following schedule. We request you to attend the meeting and give your valuable inputs.
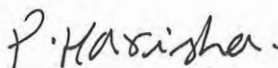
Date: 17/08/2019
Time: 11.00 am
Venue: NCET, Bengaluru.

Agenda:

1. Review of the minutes of the previous meeting.
2. Approval of the results for the AY 2018-19.
3. Amendment of regulation.
4. Scheme for students from 200 Credits to 175 credits.
5. Approval of resolution of BOS and JBOS.
6. Approval of Scheme & Syllabus for the AY2019-20.
7. Project Funding.
8. Graduation Day.
9. MOU with Sri Sathya Sai Institute of Higher Learning.
10. Major activities in the College.
11. Civil Engineering Job Mela and Placement statistics.
12. Civil Engineering students Internship in NCC.
13. Any other matter with the permission of the chair.

Member Secretary

Principal

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under Visvesvaraya Technological University)

NAGARJUNA
COLLEGE OF ENGINEERING
AND TECHNOLOGY

Academic Council Meeting # 6   17.08.2019

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Sl. No.	Name	Signature
1.	Dr. Srikanta Murthy K, Principal	17.8.19
2.	Dr. Nagesh Poojary, Lead Technical Architect, Continental Technical Center, Bengaluru	
3.	Mr. Dheerendra Madhusudhan, Chief Technology Officer, PthinkS, Bengaluru	ABSENT
4.	Mr. R Anish Simha, Sr. General Manager, Rinac India Ltd, Bengaluru	R Anish Simha
5.	Mr. BK Ramesh, Managing Director, Zen Building Solutions Pvt., Ltd., Bengaluru	ABSENT
6.	Dr. Nanjundaswamy C, Principal, Dr. Ambedkar Institute of Technology, Bengaluru	ABSENT
7.	Dr. T Ananthapadmanabha, Principal, NIE Institute of Technology, Mysuru	ABSENT
8.	Dr. G N Mohan Babu, Principal, BMS Institute of Technology, Bengaluru	
9.	Dr. K. Kumar, Dean (R&D), Prof. in Civil Engineering	ABSENT
10.	Dr. S G Gopala Krishna, Prof. in Mechanical Engg.	17.8.19
11.	Dr. H C Yogeesha, COE & Prof. in Mechanical Engg.	Yogee 17/8/19
12.	Dr. Nagesh K N, HOD-ECE	Nagesh 17/8/2019
13.	Dr. Gururaj M, HOD-CSE	17/8/19
14.	Dr. Mamatha G, HOD-ISE	G Mamatha 17/8/19
15.	Dr. N Kapilan, HOD-ME	N Kapilan
16.	Dr. D L Venkatesh Babu, HOD-CV	17/8/19
17.	Dr. Prachi Beriwala , HOD-MBA	17/8/19
18.	Dr. P Harisha, Vice Principal	P. Harisha.

NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under Visvesvaraya Technological University)

Academic Council Meeting # 7 Notice

16/09/2020

We are happy to inform that the online Academic Council meeting #07 of our college will be held as per the following schedule. We request you to attend the meeting and give your valuable inputs.

Date: 24/09/2020
Time: 11.00 am
- **The link will be sent to your mail id on 24.09.2020 at 10.00am**

Agenda:

1. Review of the minutes of the previous meeting.
2. ARIIA and Times ranking.
3. Approval of new two UG courses.
4. Permission to attend higher sem classes.
5. Approval of Change in Scheme and Syllabus for the AY 2020-21.
6. Amendments to Regulation.
7. Digital Intervention details during lockdown.
8. Grants (Project /Consultancy).
9. Result Analysis for the AY 2019-20 (odd sem).
10. Placement statistics for the year 2019- 20
11. Graduation Day.
12. State level Science Fest SCINOVA – 2019.
13. Staff & Students' Achievements.
14. MOU & Collaborations.
15. Major activities in the College.
16. Any other matter with the permission of the chair.

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

P. Harisha.
Member Secretary 16/9/2020

16-9-2020
Principal

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NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under Visvesvaraya Technological University)

Academic Council Meeting # 7   24/09/2020

Sl. No.	Name	Signature
1.	Dr. S. G. Gopala Krishna, Principal	24-9-2020
2.	Dr. Nagesh Poojary, Lead Technical Architect, Continental Technical Center, Bengaluru	Joined online
3.	Mr. Dheerendra Madhusudhan, Chief Technology Officer, PthinkS, Bengaluru	Absent
4.	Mr. R Anish Simha, Sr. General Manager, Rinac India Ltd, Bengaluru	Joined online
5.	Mr. BK Ramesh, Managing Director, Zen Building Solutions Pvt., Ltd., Bengaluru	Absent
6.	Dr. Nanjundaswamy C, Principal, Dr. Ambedkar Institute of Technology, Bengaluru	Absent
7.	Dr. G N Mohan Babu, Principal, BMS Institute of Technology, Bengaluru	Joined online
8.	Dr. K. Kumar, Dean (R&D), Prof. in Civil Engineering	Joined online
9.	Dr. H C Yogeesha, COE & Prof. in Mechanical Engg.	*signature*
11.	Dr. Jithendra Mungara, Prof. Dean Academic	Jithendramungara 24/09/2020
12.	Dr. Nagesh K N, HOD-ECE	Nagesh 24/9/2020
13.	Dr. Anitha Patil, HOD-CSE	Joined online
14.	Dr. Kantharaj.D G, HOD-ME	*signature* 24/09/2020
15.	Dr. D L Venkatesh Babu, HOD-CV	Joined Online
16.	Dr. Poornima U K, Incharge HOD-MBA	Poornie UK 24/9/20
17.	Dr. Mamatha. G, Director, Training and Placement	Joined online
18.	Dr. P Harisha, Vice Principal	P.Harisha-24/9/2020
19.	Dr. Srikanta Murthy. K Special invitee	Joined online

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU
An Autonomous College under VTU, Belagavi

NAGARJUNA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Governing Body Meeting # 8

Proceedings of the Governing Body Meeting # 8 held on 27.01.2020

The Governing Body Meeting # 8 was held on **27.01.2020**, at 11.00 AM in Nagarjuna Education Society Office, Yelahanka, Bengaluru.

The agenda for the meeting were as follows:

1. Review of the minutes of the previous meeting.
2. Approval of amendment to the regulations.
3. Scheme for students from 200 Credits to 175 credits.
4. Result Analysis for the Academic year 2019-20(odd sem).
5. Budget Proposal for the A.Y 2020-21.
6. Approval for Equivalence courses for Change of College.
7. Approval of Change in Scheme and Syllabus.
8. Approval of Appointments made from January 2019 to till date.
9. VTU Affiliation for the A.Y 2020-21.
10. Approval to apply for AICTE to start new programmes in B.E for the A.Y 2020-21.
11. NIRF Submission.
12. Grants (Project /Consultancy).
13. Placement statistics for the year 2019- 20.
14. 3rd Graduation Day.
15. State level Science Fest SCINOVA – 2019.
16. Staff & Students' Achievements.
17. Major Activities of the college.
18. Vasudaiva Kutumbakam – Cultural exchange programme.
19. Civil Engineering Internship at NCC.
20. Any other matter with the permission of the chair.

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU

Members Present:

1.	Sri. J V Ranga Raju, Chairman, NES, Bengaluru.	Chairman
2.	Smt. Sridevi Ranga Raju, Founder Member,NES, Bengaluru	Member
3.	Sri. J Chaitanya Varma, Secretary, NES, Bengaluru.	Member
4.	Mrs. Bhanu Chaitanya Varma, Member, NES, Bengaluru	Member
5.	Dr. K S Deshikachar, Sr. Director, NES, Bengaluru	Member
6.	Dr. K G Chandrashekara, Principal Govt SKSJT Institute, Bengaluru	State Govt. Nominee
7.	Dr. C K Subbraya Registar, Adichunchanagiri University, B G Nagara ,Nagamangala Taluk, Mandya.	VTU Nominee
8.	Sri. J Srirama Raju, Director, NCC Urban, Bengaluru	Member
9.	Sri. C Premachandar Reddy Executive Vice President, NCCL, Bengaluru	Member
10.	Dr. S G Gopala Krishna, Director, NES, Bengaluru	Member
11.	Dr. P. Harisha, Vice Principal, NCET, Bengaluru	Member
12.	Dr. Srikanta Murthy K Principal, NCET, Bengaluru	Member Secretary

Members Absent:

1.	Prof. S Niranjali Devaraj, Prof & Head, Department of Biochemistry, University of Madras.	UGC Nominee

Minutes of the Meeting:

1. Review of the minutes of the previous meeting:

Member Secretary briefed about the agenda & resolutions made during previous Governing Body meeting #7, some important points are:

- **Extension of validity period for NAAC Accreditation:**

  Information was given regarding the extension of NAAC Accreditation.

- **MOU with Sri Sathya Sai Institute of Higher Learning:**

  Discussed about the best ways of exploring benefits through this MOU.

- **Approval of Appointments made from April 2018 to December 2018:**

  Governing body approved all the appointments.

- **International Internship:**

Information was given about various International Internship opportunities to the students and details of the students who had opted this scheme.

- **Internship and Project work at NCC:**

  Information regarding participation of final year civil engineering students at the different construction sites like BMRCL, BBMP White topping, IIM buildings, Kries Auditorium etc was given. Students in batches are deputed to more than one site and they will be guided by engineers from NCC. This is an unique opportunity given to the students of NCET by NCC and Member Secretary thanked NCC for extending the opportunities.

2. Approval of amendment to the regulations:

Member Secretary explained the guidelines from the VTU regarding the vertical progression, Award of B.E degree, B.E (Honors) degree and mandatory courses in III and IV semester. He also explained the necessity of amendment of regulations to fulfill the guidelines given by VTU.

Following are the Amendments of Regulations proposed:

2.1 Vertical Progression:-

As per the instructions from VTU Circular dated 31.7.2019, following changes are proposed.

- There shall be no restriction for promotion from an odd semester to the next even semester.

- Mandatory non credit courses shall not be considered for Vertical progression.

- Students having not more than **FOUR F** grades in the two semesters of **first year** shall be eligible to move to **second year.**

- Students having not more than **FOUR F** grades in the **four semesters of I and II year** shall be eligible to move to **III year.**

- Students who have earned all the prescribed credits of **I year** and having not more than **FOUR F** grades in the **four semesters of II and III year** shall be eligible to move to **IV year.**

2.2 Award of Degree:-

- Student shall be declared to have completed the B.E. Programme degree and is eligible for the award of the degree provided the student has earned the prescribed number of credits.

- For the award of degree, a CGPA >= 5.00 at the end of the programme is mandatory.

- Completion of Additional Mathematics I and II shall be mandatory for the award of the degree for lateral entry diploma students.

- Over and above the academic credits, every regular student shall earn 100 Activity points and every student admitted through lateral entry should earn 75 Activity points for the

award of the degree. This is applicable to students taking admission starting from 2018-19 (regular) and 2019-20 for lateral entry students.

- Students transferred from other Universities to fifth semester shall earn 50 activity points. This is applicable to students taking admission starting from 2020-21.

- The activity points earned shall be reflected on the students' eighth semester Grade card.

- In case, student fail to earn the prescribed activity points before the commencement of the 8th semester, 8th semester grade card shall be issued only after earning the required activity points. Students shall be admitted for the award of the degree only after the release of the 8th semester grade card.

2.3 B.E (Honors) degree

- A student shall be declared to have completed the programme of B.E. degree with Honors if the student has earned additional 20 or more credits through approved online courses.

- Candidate should have a CGPA score of 8.00 and above during the registration.

- Students having backlogs in any of the regular semester courses at any stage are not considered for the scheme.

- The courses from the main curriculum are not to be considered.

- MOOCs from NPTEL/SWAYAM/EDx / Coursera / Udacity, etc with certification is only considered.

- List of MOOCs shall be announced by the department for each semester.

2.4 Mandatory Courses

- Lateral entry students should register for Additional Mathematics I and II in the regular 3rd & 4th Semesters, respectively.

- Kannada is a mandatory subject in the regular 3rd & 4th Semesters, respectively.

2.5 Gracing policy for award of degree

- A grace up to a maximum of 0.05 shall be considered to overall CGPA for the benefit of a student in awarding the class i.e. if the final CGPA of a student is 6.70, he/she will be awarded "First Class" and 7.70 as "First Class with Distinction" by adding a grace of maximum of 0.05.

After the discussion, Governing Body resolved to approve above mentioned regulations, which were approved in Academic Council meeting #6.

3. Scheme for students from 200 Credits to 175 credits:

Member Secretary explained the new credit structure which is reduced from 200 to 175 and following points were approved by the Governing Body with respect to reduction.

➤ Decided to follow the scheme suggested by the VTU.

➤ Irrespective of any Scheme studied at lower level, students are permitted to study the present scheme.

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU
An Autonomous College under VTU, Belagavi

NAGARJUNA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Governing Body Meeting # 7

Proceedings of the Governing Body Meeting # 7 held on 11.03.2019

The Governing Body Meeting # 7 was held on **11.03.2019**, at 11.00 AM in Nagarjuna Education Society Office, Yelahanka, Bengaluru.

The agenda for the meeting were as follows:

1. Review of the minutes of the previous meeting
2. Result Analysis for the Academic year 2018-19 (Odd Sem)
3. Ratification for Change of College
4. Extension of validity period for NAAC Accreditation
5. Visit of VTU Autonomous Review Committee & VTU LIC
6. AICTE – EOA
7. NIRF
8. Application for 12(B) recognition
9. Application for AQIS
10. State level NCET Science Fest - 2018
11. Mock CET
12. AQUEST-National Level Quiz Competition
13. Approval of Appointments made from April 2018 to till date
14. Placement statistics for the year 2018-19 till date
15. MOU with Sri Sathya Sai Institute of Higher Learning
16. Staff & Students' Achievements
17. Major Activities of the college
18. International Internship
19. Internship and Project work at NCC
20. Grants (Project /Consultancy)
21. Any other matter with the permission of the chair

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

1. **Review of the minutes of the previous meeting:**

   a. It was resolved to reduce the total number of credits to 175 as per VTU directions for UG Programme.

   b. Member Secretary informed the members that, the college got NBA accreditation for 4 UG Programs (EC, IS, CV & ME) from A.Y. 2018-19 to 2020-21.

   c. Member Secretary informed that, open electives and PBL Courses were offered to the students by all the departments.

   d. It was resolved that, institution has to apply for
      - ❖ Increase in Intake in MBA from 60 to 120.
      - ❖ Closure of one division (60) in Mechanical Engineering Branch.
      - ❖ Closure of three PG courses
          i. M.Tech – VLSI & Embedded Systems
          ii. M.Tech – Computer Science & Engineering
          iii. M.Tech – Machine Design
      with effect from the academic year 2019-20.

   e. Members were informed that, provisions will be made to the students to take up an internship in the universities abroad.

2. **UG Result Analysis for the Academic year 2018-19 (Odd Sem):**

   Member Secretary briefed the UG Results of the Autonomous Programme for the Academic Year 2018-19.

   Chairman suggested to enhance results by conducting special classes/test for the identified slow learners. It was general opinion that, results of 3rd & 4th year were satisfactory and 1st & 2nd year needs to be improved.

   Mr. Chaitanya Varma enquired about framing the syllabus for the first year courses as per the requirement of the branches.

   The Result analysis is provided in Annexure – I.

3. **Ratification for Change of College:**

   Member Secretary informed the members that, three students were taken admission for Change of College in our institution.

Change of College Students list for the year 2018-19					
Sl. No.	Branch	Old USN	New USN	Student Name	COC
1	M.Tech -SCS	1NT17SCS07	1NC17SCS04	PRIYA ESTHER W	Nitte Meenakshi Institute of Technology, Bengaluru
2	EC from EEE	4BD15EE034	1NC15EC105	SANDESH Y.M	Bapuji Institute of Engineering & Technology, Davangere
3	CV from EC	2017ECE0072	1NC17CV900	DHARSHAN BHAT	Presidency University, Bengaluru

The change of college of the above students and the equivalence courses to be studied by the students as recommended by respective BOS & Academic Council were ratified.

4. NAAC Accreditation:

The Member Secretary informed all the members that, the validity of NAAC Accreditation has been extended up to 31.12.2021 from the existing validity of 24.05.2021.

The members expressed their happiness.

5. Visit of VTU Autonomous Review Committee:

Member Secretary informed the members that, the VTU Autonomous Review Committee had visited the college on 14.11.2018.

Visit of VTU Local Inquiry Committee:

Member Secretary informed the members that the VTU LIC had visited the college on 15.02.2019 for the approval of continuation of affiliation for the academic year 2019-20.

Members suggested to implement the suggestions given by the committee members for further improvement.

6. AICTE - EOA:

The Member Secretary informed all the members that, institution has submitted for EOA and for approval of the followings to AICTE, New Delhi (as per the resolution of the Governing Body meeting held on 04.04.2018).

* Increase in intake in MBA from 60 to 120
* Reduction of intake from 120 to 60 in Mechanical Engineering.
* Applied for the closure of following three PG courses from the academic year 2019-20.
    i.   M.Tech – VLSI & Embedded Systems
    ii. M.Tech – Computer Science & Engineering
    iii. M.Tech – Machine Design

7. NIRF:

The Member Secretary informed that, institution has submitted the data for National Institutional Ranking Framework (NIRF) for the year 2019.

Chairman enquired about the procedure of ranking the institutions and its benefits. Member Secretary explained the procedure.

8. Application for 12(B) recognition:

The members were informed that, the institution has applied for 12(B) recognition of UGC Act 1956 for the Central financial assistance under various schemes. The documents submitted by

the college have been forwarded by the Registrar, VTU, Belagavi to the University Grant Commission.

9. Application for AQIS:

The Member Secretary informed that, institution has sent proposals to AICTE Quality Improvement Schemes (AQIS) under the following categories:

- Short Term Training Programme (STTP)
- Research Promotion Scheme (RPS)
- MODROBS

10. State level NCET Science Fest - 2018:

Member Secretary informed that NCET organized a **State Level NCET Science Fest-2018** in collaboration with Poorna Prajna Institute of Scientific Research (PPISR) for Pre University College students of Karnataka on 16th November 2018.

The major events organized were Project Exhibition, Science & Tech Quiz, Tech Talk and Debate. Dr. A B Halgeri, Director, PPISR was the chief guest. He appreciated the initiative taken up by the NCET to promote and explore Science skill of the students. He emphasized on the importance of science education as it is the core for all technical areas. He advised the students to participate actively in such events to improve their knowledge beyond the curriculum. More than 500 students from various PU Colleges across Karnataka were participated in fest. The prizes were distributed for all the Winners in the various events.

Members were very happy and congratulated Principal and his team for the successful completion of Science Fest.

11. NCC Mock CET:

Member Secretary informed that, as a part of the Corporate Social Responsibility (CSR) initiative, Nagarjuna Construction Company (NCC) has planned to conduct the Mock CET for 2nd PUC students across Karnataka. The Nagarjuna College of Engineering and Technology took the responsibility and conducted the test on behalf of NCC. 5473 students from 100+ colleges across Karnataka have taken the Mock CET. He also explained that, the ranks for the students were given College wise, Zonal wise and State wise so that students can understand their performance in all the levels.

It was suggested to conduct the Mock CET through online mode in future, so that it can help the students in understanding the online mode.

The Governing Body members congratulated Principal and his team for their involvement and efforts in successful conduction.

The detailed Mock CET statistics provided in the Annexure – II

12. AQUEST - National Level Quiz Competition:

Member Secretary informed that, the Quarter final of a National Level Quiz Competition "AQUEST" was organized at NCET by ISHRAE, Bengaluru Chapter. The programme was sponsored by M/s Hitachi. Mr. Pankaj J. Shah, Past National President ISHRAE HQ, Co-Chairman, ACREX 2000 & ACREX 2002 was the Chief Guest. Mr. A. Madhukar, Immediate Past President of ISHRAE Bengaluru Chapter was the quiz master. 21 teams were participated in the event.

13. Approval of Appointments made from April 2018 to till date:

Member Secretary listed the appointments made in the different departments for different cadres and sought the approval of the Governing Body.

The Governing Body resolved to approve all the appointments made from April 2018 to till date.

The approved list is provided in the Annexure – III

14. Placement statistics for the year 2018-19 till date:

Member Secretary has presented the statistics of the placements till date for the academic year 2018-19.

He also explained about the special training classes related to the placements conducted for the final year students.

Members were happy with the placement status and suggested to improve the same.

The placement details provided in Annexure – IV

15. MOU with Sri Sathya Sai Institute of Higher Learning:

Member Secretary happily informed that, an MOU has been signed with Sri Sathya Sai Institute of Higher Learning (SSIHL), Prasanthi Nilayam to facilitate mutual exchange of scientific expertise and research facilities in physical, chemical, mathematical and engineering sciences. Further he explained the impact and outcome of the MOU.

Members were very happy and congratulated Principal and his team for this achievement.

16. Staff & Students' Achievements:

Members were informed about the achievements of the staff and students' in academic, co-curricular and sports activities.

The members congratulated all achievers.

Students and staff achievements list is provided in the Annexure – V

17. Major Activities of the college:

Member secretary listed the different academic, cultural and sports activities conducted in the college from 05.04.2018 to till date.

Activities list is provided in the Annexure – VI

18. International Internship:

Member Secretary informed that, 12 students successfully completed the International Internship program in the following universities for a period of 42 days.

- ❖ Tor- Vergata University, Rome, Italy
- ❖ Athens Institute of Technology, Greece
- ❖ Ural Federal University, Russia
- ❖ Teesside University, Middlebrough, UK

He also informed that, members from the University of Strathclyde, UK came to NCET and interacted with our students on the benefits of International Internship at University of Strathclyde, UK.

Members suggested that, the number of students taking international internship should be increased and interaction with more universities should be initiated.

19. Internship and Project work at NCC:

Member Secretary informed that, the institution is encouraging Civil Engineering students to brighten their knowledge by providing an Internship and Project work at NCC Ltd on current live projects of NCC all over India. Students will be mapped by the area of interest and their location preferences like metro rail works, hospitals, bridges, etc. Students are actively encouraged to take up consultancy work of live projects.

Mrs. Bhanu Chaitanya Varma explained about the procedure of Internship and Project work at NCC.

Chairman suggested to take necessary steps to improve the involvement of the students in understanding the concepts, working of expensive equipments and technology.

Mr. Chaitanya Varma suggested to involve the faculty members for the Internship and Project work at NCC more effectively so that, they can get more practical exposure towards the concepts. They can use this experience while designing the syllabus for autonomous courses.

20. Grants (Project /Consultancy) :

Members were informed that, NCET received the grants from ASHRAE's Undergraduate Program Equipment Grant titled "Development and evaluation of a low cost radiant cooling

system" was approved for funding in the amount of $8000, Dr. N Kapilan, Prof. and Head, Department of Mechanical Engineering will be the Principal Investigator.

Members congratulated Principal and concerned Principal Investigators for receiving funds.

21. Any other matter with the permission of the chair:

Chairman suggested for identifying the new technologies in different areas and educating the students to help them in updating their knowledge. He also suggested to arrange more site visits for the Civil Engineering students so that, they will be exposed to more practical aspects.

Dr. Chandrashekara K G, Govt. nominee suggested to strengthen the peer tutoring to improve the results.

The member secretary thanked the members for their valuable suggestions and solicited their co-operation in all future activities of the institution.

5.4.19

Principal

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Governing Body Meeting # 6

Proceedings of the Governing Body Meeting #6 held on 04.04.2018

The Governing Body Meeting #6 was held on **04.04.2018**, at 11.30am in Nagarjuna Education Society Office, Yelahanka, Bengaluru.

The agenda for the meeting were as follows:

1. Nomination of Dr. Krishna Venkatesh & Dr. C K Subbaraya to the Governing Body by VTU
2. Review of the minutes of the previous meeting
3. Reduction of Credits
4. UG Result Analysis for the Academic year 2017-18
5. NBA Progress
6. AICTE – EOA
7. PMKVY
8. FRC
9. Establishment of National Resource Centre
10. SAGY & IRDP Progress
11. UDBHAV-2K17 – Technical Fest
12. AICTE Swachhta Rankings
13. Budget proposal for 2018-19
14. Appointments made from August 2017 to till date
15. Placement statistics for the year 2017-18
16. Staff & Students' Achievements
17. Major Academic Activities of the college
18. Digital Valuation Centre
19. Peer Tutoring
20. Open Electives
21. PBL
22. International Internship
23. Club Activities
24. Grants (Project /Consultancy)
25. Any other matter with the permission of the chair

NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU

Members Present:

1.	Sri. J V Ranga Raju, Chairman, NES, Bengaluru.	Chairman
2.	Smt. Sridevi Ranga Raju, Founder Member, NES, Bengaluru	Member
3.	Sri. J Srirama Raju, Director NCC Urban, Bengaluru	Member
4.	Sri. J Chaitanya Varma, Secretary, NES, Bengaluru.	Member
5.	Sri. C Premachandar Reddy Executive Vice President, NCCL, Bengaluru	Member
6.	Dr. K S Deshikachar, Director, NES, Bengaluru	Member
7.	Smt. Bhanu Chaitanya Varma, Member, NES, Bengaluru	Special Invitee
8.	Dr. K G Chandrashekara, Principal Govt SKSJT Institute, Bengaluru	State Govt. Nominee
9.	Dr. C K Subbaraya, Principal, Adichunchanagiri Institute of Technology, Chikkamagaluru.	VTU Nominee
10.	Dr. N G S Udupa, Vice Principal (Admn), NCET, Bengaluru	Member
11.	Dr. P. Harisha, Dean SW, NCET, Bengaluru	Member
12.	Dr. S G Gopala Krishna, Principal NCET, Bengaluru	Member Secretary
13.	Dr. Srikanta Murthy K Vice Principal (Academic), NCET, Bengaluru	Special Invitee

Members Absent:

1.	Prof. S Niranjali Devaraj, Prof & Head, Department of Biochemistry, University of Madras.	UGC Nominee
2.	Dr. Krishna Venkatesh, Director, Centre for Incubation, Innovation, Research & Consultancy (CIIRC), Jyothi Institute of Technology, Bengaluru.	VTU Nominee

Minutes of the Meeting:

Dr. S. G. Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Member Secretary, Governing Body welcomed the Chairman Sri. J.V. Ranga Raju, Secretary Mr. Chaitanya Verma and all other members to the meeting.

1. **Nomination of Dr. Krishna Venkatesh & Dr. C K Subbaraya to the Governing Body**

   Member Secretary happily informed the members that, Dr. Krishna Venkatesh, Director, Centre for Incubation, Innovation, Research & Consultancy (CIIRC), Jyothi Institute of Technology, Bengaluru is nominated as VTU nominee and Dr. C K Subbaraya, Principal, Adichunchanagiri Institute of Technology, Chikkamagaluru is nominated as nominee of Vice-Chancellor VTU to the Governing Body.

   The Chairman and members of the Governing Body welcomed Dr. C K Subbaraya to the meeting and requested him to extend his co-operation.

2. **Review of the minutes of the previous meeting.**

   - Member Secretary informed the members that the Open Electives and Certification Courses were offered to the students as decided in the previous GB meeting.

   - Principal informed all the members that, the institution has been recognized as Active Nodal Centre of Virtual Lab. Further, institution is identified as Top Nodal Centre during February 2018. All the members congratulated Principal and his team for the achievement.

   - Member secretary informed that, the institution has successfully completed the Training Programme under AICTE-PMKVY Phase I for the year 2017-18.

3. **Reduction of Credits**

   Member Secretary informed that, AICTE has reduced the credits from 200 to 160. But, VTU recommended the number of credits as 175. Member secretary proposed to reduce the credits to 175 and requested for the approval.

   The Governing Body approved the same.

4. **UG Result Analysis for the Academic year 2017-18**

   Member Secretary briefed the results of the Autonomous Programme for the academic Year 2017-18. Members were happy with the results.

   The Result analysis is provided in Annexure – III.

5. **Progress of NBA Accreditation**

   Member Secretary informed the members that, college has applied for NBA Accreditation and the NBA Committee visit is scheduled on **May 4, 5 & 6, 2018.** Member Secretary invited the Chairman for his gracious presence during the NBA team visit.

   The members appreciated the efforts of the institution in this regard.

6. **AICTE – EOA & Reduction in Intake**

The Member Secretary informed all the members that, institution has submitted AICTE-EOA with closure of one division (60) each in Mechanical Engineering and Civil Engineering Branch.

Dr. C K Subbaraya sought clarification for the reduction in intake as previous year admissions were good. Sri. Chaitanya Varma, Secretary, informed that, to attract the quality students, management has decided to reduce the intake.

Sri. J Srirama Raju suggested to start new courses in Civil Engineering like Quantity Survey, Construction Engineering, Supply Chain Management, etc.,. Member Secretary informed that, online certification course from IITs / IISc / SWAYAM / EDX were offered to the students on the above courses. He also informed that, new programs can be started only after NBA accreditation.

7. **PMKVY**

Member secretary informed all the members that, AICTE has sanctioned five courses under PMKVY Phase-II for the year 2017-18, 3 in Civil Engineering, 1 each in Electronics & Communication Engineering & Mechanical Engineering.

Dr. C K Subbaraya suggested to visit the schools near the campus and get the dropout students details and encourage them to participate in the PMKVY programme.

Sri. J Srirama Raju has suggested that he can extend his support through NCC Urban for hiring the students trained under PMKVY. NCC Urban would like to hire more skilled persons. Further, he suggested to nominate one faculty to coordinate with NCC Urban in this regard.

The members were glad to know that the institute is actively participating in the PMKVY programs every year.

PMKVY sanctioned courses list is provided in Annexure – IV.

8. **Fee Regulatory Committee**

The members were informed that, the institution has submitted the proposal for revising the Fee Structure for the academic year 2018-19.

9. **Establishment of National Resource Centre**

The members were happy to know that, the Institution has been identified as National Resource Centre by National Cyber Safety and Security Standards, New Delhi.

Members were happy and advised to take the maximum benefit of the same.

10. SAGY & IRDP Progress

Saansad Adarsha Grama Yojana (SAGY)

The members were informed that, the institute is associated with the AICTE initiative of village development program under **SAGY**. Member Secretary informed that, he was invited for the National Conference as a **Speaker** and Mr. Sanath Kumar K R, Associate Professor presented the paper during the conference on **'Developed Village - Developed Nation'** organized by AICTE, New Delhi on 29th and 30th October 2017.

Further, Member Secretary informed that, institute has organized two days Master Trainers' Workshop on SAGY on 25th & 26th November 2017. The workshop was inaugurated by **Prof. Anil Sahasrabudhe,** Chairman, AICTE, New Delhi on 25.11.2017. 28 technical institutions were invited to participate. The top officials of AICTE were present during the program.

The members were very happy and congratulated Member secretary for the same.

Integrated Rural Development Programme (IRDP)

The members were informed that, the institute in association with Sri Sathya Sai Annapoorna Trust, Muddenahalli has introduced a course called **IRDP** for second year students of all the branches of engineering in the autonomous curriculum. The main aim of this course is to develop various skills among the students and students will be visiting the villages as part of the course and interact with children. The students are also required to interact with the villagers and panchayat officials for preparing the action plan to develop the villages.

The list of villages covered under IRDP is provided in the Annexure – V.

11. UDBHAV-2K17 – Inter Collegiate Technical Fest

The members were informed that, the Technical Fest "**UDBHAV 2017**" was inaugurated on 25th October 2017 by **Dr. Manpreet Singh Manna,** Director (Admin & Swayam), AICTE, New Delhi. The fest was conducted with the major events like Project Exhibition, Technical Paper Presentation, Circuit Debugging, Quiz, 3-D Modelling, Drone Competition, Tom Dick and Harry, Fast Surveying, Best of Waste, Coding, Gaming, Web Designing, etc related to various engineering streams. 540 students from various colleges have participated in different events. 84 student projects were exhibited and most of the projects were innovative. 2400 students of various engineering colleges have visited the project exhibition.

Members were very happy and congratulated Principal and his team for the successful completion of Technical Fest.

12. AICTE Swachhta Rankings

The Member Secretary informed that, institution has participated in 'Swachhata' Ranking 2017 of Higher Educational Institutions. In this connection, AICTE Swachhta Rankings committee visited the campus on 22.08.2017 & our institution was shortlisted for final selection.

Members were happy about this initiation.

13. Budget proposal for 2018-19

Member Secretary presented the approximate department wise budget for the year 2018-19. The Governing Body resolved to tentatively approve the budget for the year 2018-19. However the Chairman suggested the Finance Committee to review the budget considering the actual admission.

14. Appointments made from August 2017 to till date.

Member Secretary listed the appointments made in the different departments for different cadres and sought the approval of the Governing Body.

The Governing Body resolved to approve all the appointments made from August 2017 to March 2018.

The approved list is provided in the Annexure-VI.

15. Placement statistics for the year 2017-18

Member Secretary has explained about the placements made during the academic year. Placement in our institution was good even during less placements happening in the industry. Members were happy with the placement Status.

The placement details provided in Annexure – VII.

16. Staff & Students' Achievements

Members were informed about the achievements of the staff and students in academic, co-curricular and sports activities. The members congratulated all achievers.

Sri. J Srirama Raju enquired about the number of Ph.D holders in the institution. Member Secretary has given the number of Ph.D holders working in the college. Also it was informed to all the members that the Alumni of our institution Mr. Ravishek (1NC08CV039) of Civil Engineering has cleared Indian Engineering Service Examination.

Chairman & Smt. Bhanu Chaitanya Varma suggested that, Mr. Ravishek should be invited to the college and honoured for his achievements. Further, he may be invited to address our students to share his experience and achievements.

All members appreciated and congratulated Mr. Ravishek for his success.

Students and staff achievements list is provided in the Annexure – VIII

17. Major Academic Activities of the college

Member secretary listed the different academic, cultural and sports activities conducted in the college from 01.08.2017.

Activities list is provided in the Annexure - IX

18. Digital Valuation Centre

Members were informed that, institute has successfully completed the responsibility of VTU digital valuation center for the May/June/July 2017 & Jan/Feb 2018 Examinations.

19. Peer Tutoring

Member Secretary briefed the success rate of Peer tutoring for the III semester autonomous programmes. A detailed discussion was held on peer tutoring.

Following are the Success rate of Peer tutoring:-

- Total no. of Tutors – 54
- Total no. of Tutees – 47
- Total no. of courses opted by the Tutees – 112
- No. of courses cleared – 31
- Success Rate – 27.7%

All members appreciated the progress of the peer tutoring and suggested to strengthen the peer tutoring.

20. Open Electives

Member Secretary informed that, open electives are offered to the students by all the departments. This will enable the students to choose interdisciplinary electives of their choice.

List of open electives selected by the students is provided in the Annexure - X.

21. Project Based Learning (PBL)

Member Secretary briefed about **PBL**. This course will help the students to enhance their practical skills and expose to the real world problems. College has tied-up with various industries for guidance and help in conducting the PBL. Internship will be offered by these industries to the students if the performance of the students is satisfactory.

22. International Internship

Members were informed that, students will be provided internship in the universities abroad for a period of 42 days and 12 students have registered for this program.

Dr. C K Subbaraya & Dr. K G Chandrashekara enquired the process of selection for the International Internship. Member Secretary explained the same.

23. Club Activities

Member Secretary informed that the institution is encouraging students to brighten the hidden talents with many club activities.

Members were happy to know that students are involving in the various club activities.

List of Club Activities is provided in the Annexure - XI

24. Grants (Project /Consultancy)

Members were informed that the college has received the grants / funds for research from ISRO, GATET and Consultancy Projects.

The details of the grants and funding are:-

- Research Grant from ISRO for Mangalayan-II Related Project Rs. 16.98 Lakhs P.I. - Dr.Y.S.Kumara Swamy

- GATET Project Grant – Rs. 9.75 Lakhs - P.I. – Dr. Kumar K

- Consultancy Projects undertaken to the tune of Rs. 9.00 Lakhs.

Members congratulated Principal and concerned Principal Investigators for receiving funds.

25. Any other matter with the permission of the chair

There was no other matter to discuss, hence the member secretary thanked the members for their valuable suggestions and solicited their co-operation in all future activities of the institution.

Principal 27.4.18

PRINCIPAL
Nagarjuna College of Engineering & Technology
Devanahalli (Tq) Bengaluru (Dt.)-Pin: 562164

Governing Body Meeting # 5

Proceedings of the Governing Body Meeting #5 held on 31.07.2017

    The Governing Body Meeting #5 was held on **31.07.2017**, at 11.00am in Nagarjuna Education Society Office, Yelahanka, Bengaluru.

The agenda for the meeting were as follows:

1. Nomination of Prof. S. Niranjali Devaraj to the Governing Body by UGC
2. Review of the minutes of the previous meeting.
3. Approval of amendment to the regulations
4. Approval of Scheme and Syllabus for Third year & Fourth Year UG programmes
5. Approval of Change in Scheme and Syllabus of Second year UG Programmes.
6. Approval of Open Electives and Certification Courses
7. Result Analysis of First to Fourth Semester for the Academic year 2016-17.
8. Conferment of Autonomous status
9. VTU LIC Visit
10. Graduation Day
11. Major Academic Activities of the college
12. Google Android Development Training Programme
13. Active Nodal Centre recognition of Virtual Lab
14. Budget proposal for 2017-18
15. Appointments made from April 2017 to till date
16. Placement statistics for the year 2016-17
17. Project Grants and Funding
18. Patents
19. Consultancy
20. PMKVY
21. Application for Clean Campus (Swachatha) Ranking - AICTE and MHRD
22. MOUs with different industries & Universities.
23. Any other matter with the permission of the chair

Members Present:

1.	Sri. J V Ranga Raju, Chairman, NES, Bengaluru	Chairman
2.	Sri. J Srirama Raju, Director, NCC Urban, Bengaluru	Member
3.	Sri. J ChaitanyaVarma, Secretary, NES, Bengaluru	Member
4.	Sri. C Premachandar Reddy Executive Vice President, NCCL, Bengaluru	Member
5.	Dr. K S Deshikachar, Director,NES, Bengaluru	Member
6.	Prof. S Niranjali Devaraj, Prof & Head, Department of Biochemistry, University of Madras.	UGC Nominee
7.	Dr. N G S Udupa, Vice Principal (Admn), NCET, Bengaluru	Member
8.	Dr. S G Gopala Krishna, Principal NCET, Bengaluru	Member Secretary
9.	Dr. Srikanta Murthy K Vice Principal (Academic), NCET, Bengaluru	Special Invitee

Members Absent:

1.	Smt. Sridevi Ranga Raju, Founder Member,NES, Bengaluru	Member
2.	Dr. K G Chandrashekara, Principal Govt SKSJT Institute, Bengaluru	State Govt. Nominee
3.	Dr. A S Deshpande, Principal, Gogte Institute of Technology, Belagavi	VTU Nominee
4.	Dr. P. Harisha, Dean SW, NCET, Bengaluru	Member

Minutes of the Meeting:

Dr. S. G. Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Member Secretary, Governing Body welcomed the Chairman Sri. J.V. Ranga Raju, Secretary Mr. Chaitanya Verma and all other members to the meeting.

1. **Nomination of Prof. S. Niranjali Devaraj to the Governing Body by UGC**

   Member Secretary happily informed the members that Prof. S Niranjali Devaraj, Prof & Head, Department of Biochemistry, University of Madras is nominated as UGC nominee to our Governing Body. The Chairman and members of the Governing Body welcomed Prof. S.Niranjali Devaraj to the meeting and requested her to guide and assist the college to perform well.

2. **Review of the minutes of the previous meeting.**

   - Member Secretary informed the members that the UGC Expert Committee had visited the college on 20th and 21st Dec 2016 for the grant of autonomous status.

   - Principal informed all the members that, the institution has been conferred Autonomous Status for the period 2016-17 to 2021-22 by UGC. All the members congratulated Principal and his team for the achievement.

   - Principal thanked Honourable member of the Governing Body Sri. J Srirama Raju, Director NCC Urban Infrastructure Ltd., for helping the college to establish industry links for interaction. He also informed that two staff members have been identified to visit & interact with the industries and they have already visited companies like Praxair, Sandisk & Speridian.

   - Member secretary informed the members that, the institution has established National Instruments Academy and the training for the faculty and students in Labview software are being conducted.

3. **Approval of amendment to the regulations**

   Member Secretary has proposed to rename the **Supplementary Semester** as **Summer Term** in the regulations and requested for the approval.

   The Governing Body approved the above amendment to the regulations.

4. **Approval of Scheme and Syllabus for Third year & Fourth Year UG programmes**

Member Secretary presented the detailed Scheme & Syllabus of the 3rd and 4th Year UG programmes.

The Governing Body resolved to approve the Scheme and Syllabus for the 3rd and 4th Year UG programmes. The approved Scheme and Syllabus is provided in the Annexure-I.

5. **Approval of Change in Scheme and Syllabus of Second year UG Programmes.**

The Member Secretary in his presentation explained the necessity for change in the Scheme and Syllabus of Second year and also briefed about the changes in the syllabus to the GB members.

The Governing Body resolved to approve the change in the Scheme and Syllabus of Second year – Changes attached in the Annexure -II

6. **Approval of Open Electives and Certification Courses**

The Member Secretary presented a list of Open Electives and Certification Courses which are to be offered across all the branches of engineering and requested for approval of the same.

The Governing Body has approved the Open Electives and Certification Courses. The approved Open Electives and Certification Courses are provided in the Annexure-III.

7. **Result Analysis of First to Fourth Semester for the Academic year 2016-17.**

Member Secretary briefed the result of the Academic Year 2016-17 Autonomous Programme. Members were happy with the results.

The Result analysis is provided in Annexure – IV.

8. **Conferment of Autonomous status.**

Principal informed all the members that, the institution has been conferred Autonomous Status for the period 2016-17 to 2021-22 by UGC. All the members congratulated Principal and his team for the achievement. Details are attached in Annexure - VI

9. **VTU LIC Visit.**

Member Secretary informed the members that the VTU LIC had visited the college on 24.05.2017 for the approval of continuation of affiliation academic year 2017-18.

10. **Graduation Day**

The members were informed that, the Graduation Day for the UG Programmes was celebrated on 07.06.2016.

11. Major Academic Activities of the college

Member secretary listed the different academic, Cultural and sports activities conducted in the college from 08.03.2017. Activities list is provided in the Annexure - VII

12. Google Android Development Training Programme.

The members were informed that four Faculty members from CSE & ISE dept.have attended the training program on Android application development course conducted by Google India in association with VTU. The college has entered into agreement with Google to offer certification courses to the students and faculty members.

13. Active Nodal Centre recognition of Virtual Lab.

The Member Secretary informed to the GB members that college has been recognized as Active Nodal Centre of Virtual Lab. The certificate was issued in Annual Nodal Centre Conference on Virtual Labs held at Amrita University, Kollam on May 12, 2017.
The member were very happy and congratulated Principal for the same.

14. Budget proposal for 2017-18

Member Secretary presented the approximate budget department wise for the year 2017-18.
The Governing Body resolved to approve the budget for the year 2017-18.

15. Appointments made from April 2017 to till date.

Member Secretary requested for ratification of the appointments made in the institution.
The Governing Body resolved to ratify all the appointments made from April 2017 to till date.
The approved list is provided in the Annexure-VIII.

16. Placement statistics for the year 2016-17.

Member Secretary has explained about the placements made during the previous academic semester. During the last year placement was very dull in IT sector. In spite of that the placement in our institution was good. Members were happy with the placement Status.
The placed student list is provided in Annexure –IX

17. Project Grants and Funding.

Members were informed that, college has received the grants / fund for research from ISRO, GATET, KSCST and Consultancy Projects.

The details of the grants and funding are,

- Research Grant from ISRO for Mangalayan-II Related Project Rs. 16.98 Lakhs P.I. - Dr.Y.S.Kumara Swamy
- GATET Project Grant – Rs. 9.75 Lakhs - P.I. – Dr. Kumar K
- Consultancy Projects undertaken to the tune of Rs. 3.00 lakhs.
- Seven Student Projects sponsored by KSCST.

Members congratulated Principal and Concerned Principal Investigators for receiving funds from Govt. agencies.

18. Patents.

Member Secretary informed that, Two Patents are filed from our college with the following details:

1. Patent No.: 201641039587 dated: 21.11.2016

"An improved power generation unit useful for residential requirement suitable to install in Septic tank"

2. Patent No.: 201741023300 dated: 03.07.2017

"An improved super plasticizer formulation for concrete mixing based on amino carboxylic compound"

Patents filed by Dr. Krishnan Kumar , Dean R&D and Prof. Civil Engineering

Dr. S G Gopala Krishna, Principal, NCET

Dr. Rajendra S, Prof. & Head – Civil Engineering

& four Students from Civil Engineering and E&C branch

Members congratulated Principal and the team for the achievement.

19. Consultancy

Members were informed that, college has received Consultancy Projects from Bagmane Developer's Projects for Testing of Steel as per IS 1786 . Estimated consultancy amount is Rs. 10 lakhs per year.

Members were very happy and congratulated Principal and the faculty from Civil Engineering.

20. PMKVY

Members were informed that, The College has conducted the Training programme on Lathe operator under AICTE - PMKVY Scheme. The same has been evaluated by Mr. Venkatagiri, Member, Karnataka Automotive sector Assessment council , for 14 students on 11.07.2017.

Further, Member secretary informed all the members that the institute has applied for Six more courses under PMKVY Phase -II for the year 2017-18.

21. Application for Clean Campus (Swachatha) Ranking - AICTE and MHRD

Member Secretary informed the GB members that, the College has applied for the following

- AICTE – Clean Campus Initiative, Prime Minister's Swachhata Bharat Mission – Submitted on 10/07/2017.
- Institutional Swachhta Ranking, All India Survey on Higher Education, Ministry of Human Resource Development, and Government of India - Submitted on 21/07/2017.

22. MOUs with different industries & Universities.

Member Secretary happily informed that an MOU has been signed with California State University, Long Beach, USA on 12.07.2017 and also he has informed that the institution is planning to have an MOU with

- University of Barcelona, Spain
- ICT Academy
  Further he explained the impact and outcome of those MOUs.

Members were very happy and congratulated Principal and his team for this achievement.

23. Any other matter with the permission of the chair

- Prof. Niranjali Devaraj sought clarification regarding the minimum of students required for offering an elective course.
- Principal clarified that 20 students are required for offering an elective course.

As there was no other matter to discuss, the member secretary thanked the members for their valuable suggestions and solicited their co-operation in all future activities of the institution.

Principal

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NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY, BENGALURU

An Autonomous Institute under VTU, Belgaum

Proceedings of the Governing Body Meeting-2 held on 03.02.2016

The Governing Body Meeting-2 was held on 03.02.2016, at 11.00am in Nagarjuna Education Society Office, Yelahanka, Bengaluru.

The agenda for the meeting were as follows:

1. Review of the minutes of the previous meeting.

   a) Approval of Rules and Regulations of the Autonomous programmes.

   b) Approval of Scheme & Syllabi.

   c) Approval of Nomination of Industry persons for Academic Council.

2. Application to National Assessment and Accreditation Council (NAAC).

3. Application to UGC requesting for 2(f).

4. Application for National Institutional Ranking Frame Work (NIRF).

5. Application for All India Survey of Higher Education (AISHE).

6. Approval of the Appointments made from August 2015 to January 2016.

7. Virtual lab Nodal Center.

8. Introduction of Peer Tutoring.

9. Introduction of Moodle Platform.

Nagarjuna College of Engineering & Technology

10. MOU's with industries.

11. Introduction of Certificate Courses.

12. Introduction of Club Activities.

13. Dates for IKYA-2016.

14. Result Analysis.

15. Implementation of Autonomous Examination Software System.

16. Developing Video Lecture for Laboratory Courses (Flip Teaching).

17. Approval of pattern of Grade Card.

18. Scheme for III and IV semester B.E Autonomous Programme.

19. Steps initiated for collaboration with Royal Melbourne Institute of Technology University (RMITU), Australia.

20. Budget Requirements.

    a) Purchase of computers.

    b) Purchase of LCD projectors.

21. Procurement of print journals.

22. Any other matter with the permission of the chair.

The members present:

1.	Sri. J V Ranga Raju, Chairman, NES, Bangalore.	Chairman
2.	Smt. Sridevi Ranga Raju, Founder Member, NES, Bangalore.	Member
3.	Sri. J Chaitanya Varma, Secretary, NES, Bangalore.	Member
4.	Sri. C Prem Chandar Reddy, Executive Vice President, NCCL, Bangalore	Member
5.	Dr. K S Deshikachar, Director, NES, Bangalore.	Member
6.	Dr. N. G. S. Udupa, Vice Principal, NCET, Bangalore.	Member
7.	Dr. P. Harisha, Dean - NCET, Bangalore.	Member
8.	Dr. S G Gopala Krishna, Principal, NCET, Bangalore.	Member Secretary

Nagarjuna College of Engineering & Technology

Members Absent:

1.	Sri. J Srirama Raju, Director, NCC Urban, Bangalore.	Member
2.	Dr. A S Deshpande, Principal, Gogte Institute of Technology, Belgaum	VTU Nominee

Minutes of the Meeting:

Dr. S.G.Gopala Krishna, Principal, Nagarjuna College of Engineering and Technology & Member Secretary, Governing Body welcomed the Chairman Sri. J.V.Rangaraju, CEO Mr.Chaitanya Verma and all other members to the meeting.

1. **Review of the minutes of the previous meeting.**
   a) **Approval of Rules and Regulations of the Autonomous programmes**
   b) **Approval of Scheme & Syllabi**

   Member Secretary informed the members that Rules & Regulations, scheme and syllabi pertaining to the autonomous programmes which were framed and approved in the previous meeting have been implemented.

   This information has been uploaded in the college website and also Hand books containing the approved rules and regulations, scheme and syllabi have been printed and distributed to the students.

   c) **Approval of Nomination of Industry persons to the Academic Council**

   Member Secretary informed that, the following industry personalities were nominated to the Academic Council.

Sl.No.	Members	Designation
1.	Dr. V Ramachandra,	Vice President, Ultra Tech Cements.
2.	Mr. Rajesh Nambiar,	Head, VMware IT Academy and VMware Academic Program for Asia Pacific and Japan (APJ) region.
3.	Mr. Madhukar,	Director, Swathi Air-Conditioner System, Bengaluru
4.	Mr.Nitin Awasthi,	Vice-president-Technical APSIS Solutions Bangalore

The members were informed that all the nominated members have accepted our request and agreed to be the nominees.

2. Application to National Assessment and Accreditation Council (NAAC).

The members were informed that an application has been submitted to the National Assessment and Accreditation Council (NAAC) for accreditation. In this regard Letter of Intent (LOI) had been sent to NAAC during June 2015. Soft copy of the Self Study Report (SSR) of the institution was uploaded in the institute website in November 2015 and Hard copies of the SSR were submitted to the NAAC in December 2015. NAAC committee visit is expected shortly.

3. Application to UGC requesting for 2(f).

The members were informed that an application had been submitted to UGC for 2(f) status. This 2(f) status once granted helps the institution to get research fundings and funds for FDPs & conferences.

4. Application for National Institutional Ranking Frame Work (NIRF).

Member Secretary explained about National Institutional Ranking Frame Work (NIRF). He told that NIRF outlines a methodology to rank institutions across the country. NIRF identifies the broad parameters for ranking various universities and institutions. Members were informed that an application had been submitted to the NIRF.

5. Application for All India Survey of Higher Education (AISHE).

Members were informed about All India Survey of Higher Education (AISHE). To portray the status of higher education in the country, Ministry of Human Resource Development has endeavored to conduct an annual web-based All India Survey on Higher Education (AISHE) since 2010-11. The survey covers all the Institutions in the country engaged in imparting of higher education.

The members were glad to know that the institute had provided the necessary data required for the survey and it is actively participating in the survey since 2012-13 every year.

6. Approval of the Appointments made from August 2015.

Member Secretary listed the appointments made in the different departments for different caders and sought the approval of the Governing Body.

Nagarjuna College of Engineering & Technology

The Governing Body resolved to approve all the appointments made from August 2015 to January 2016. The approved list is provided in the Annexure-I.

7. Virtual lab Nodal Center

The members were happy to know that Institution has been recognized as the Nodal Center for Virtual Lab facilities sponsored by MHRD, GOI and supported by all IITs and IISc. This facility is being used by staff and students.

Member Secretary briefed about the Virtual lab usages and also informed that our institution is in the 3rd rank in India in the usage of Virtual Lab facility for the year 2015.

8. Introduction of Peer Tutoring

The members were informed that the institute is proposing to introduce the concept of "Peer Tutoring". Peer tutoring is the concept wherein a peer will teach his friend and in turn peer tutor will be awarded with cash prize & certificate.

Members were happy and gave their consent to implement the scheme.

9. Introduction of Nagarjuna LMS using Moodle Platform.

Member Secretary briefed about the LMS using Moodle platform and its use in the academic environment. He also sought the approval of the Governing body for implementation of LMS using moodle platform. In this connection the training workshop for the faculty members was conducted on 29th and 30th of the January 2016.

The Governing Body suggested to conduct the awareness programme for the benefit of the students.

10. MOUs with industries.

Member Secretary listed the MOUs made in the different departments form Aug 2015 till date.

List of MOUs is given in the following table.

Sl.No.	Name of the Company	Date of Commencement
1.	Harmonix Global Foundation	03.08.2015
2.	Datatalk Services India Pvt. Ltd.	19.08.2015
3.	Global Infotech (ISCOT™)-Auto Desk	10.09.2015
4.	E I Technologies Pvt. Ltd.	15.09.2015
5.	Ethnotech Academic Solutions Pvt. Ltd.	06.11.2015
6.	M/S Ed Gate Technologies Pvt. Ltd. (Texas Instruments)	23.12.2015

The chairman suggested to establish fruitful interaction with these companies.

11. Introduction of Certificate Courses.

Member Secretary informed that as per the guidance of CEO, the institute is planning to introduce different certificate courses to improve the employability of students. These certificate courses will be designed as per the requirements of the industry.

The Governing Body suggested that the following topics be included in the certificate courses in Civil Engineering.

- Green Buildings
- Quantity Surveying
- Smart cities
- Sanitary and Plumbing
- Water Harvesting.

The proposed list of various certificate courses is provided in the Annexure-II.

12. Introduction of Club Activities.

Members were informed that the institute had introduced different cultural and sports activities under the banner "Club Activities". Artists and Professionals from various fields are invited to the college. A slot for these activities is provided in the time table.

The Governing Body appreciated the measures taken by the college.

13. Dates for IKYA-2016.

It is proposed to organize Intercollegiate Cultural Fest IKYA-2016 on 18th and 19th of March 2016. Governing Body has given its approval to proceed with the arrangements to be made for IKYA 2016.

14. Result Analysis.

Member Secretary briefed the result of the First Semester Autonomous Programme. Members were happy with the results. The Result analysis is provided in Annexure – III.

15. Implementation of Autonomous Examination Software System.

The college has successfully implemented the Examination Software. The process of examination is automated and the college was able to declare the results within a week of completion of the examination.

The Governing Body expressed its appreciation in the successful implementation of Examination Software.

16. Developing Video Lecture for laboratory courses (Flip Teaching).

Institute has planned to record the video lectures for the laboratory courses. Some experiments in Physics and Chemistry have already been recorded on an experimental basis.

The members appreciated the efforts of the institution in this regard.

17. Approval of pattern of Grade Card.

The features of the grade card for the autonomous programmes were explained by the member secretary. The inclusion of mother's name in the Grade card is very well appreciated by the Governing Body.

The Governing Body approved the Grade Card pattern and the same is provided in the Annexure-IV.

18. Scheme for III and IV semester.

Member Secretary explained the proposed scheme of teaching for III and IV semester Autonomous programmes. The chairman appreciated the introduction of laboratory component in Engineering Mathematics-III and Engineering Mathematics-IV. The Governing Body approved Scheme of Teaching and the same is provided in the Annexure-V.

19. Steps initiated for collaboration with Royal Melbourne Institute of Technology University (RMITU), Australia.

The members were informed that the institute has initiated steps to collaborate with Royal Melbourne Institute of Technology University (RMITU), Australia. In this connection, Prof. Suresh K Bhargava, Deputy Pro Vice-Chancellor (International) RMIT University, Australia has visited the NCET campus on 1st Dec, 2015.

20. Budget Requirements.

a) Purchase of computers.

b) Purchase of LCD projectors.

Member Secretary requested for the procurement of additional 140 computers with latest configuration and 26 LCD projectors.

The Governing Body approved this proposal.

21. Procurement of print journals.

The members were informed that Forty one print journals in addition to the e-journals for various departments were subscribed for the year 2016.

22. Any other matter with the permission of the chair.

Member Secretary informed that our aluminous Mr. Megha Nidhi Dahal (1NC05IS021) of Information Science and Engineering Department has cleared All India Civil Services Examination securing 63rd rank.

All members appreciated and congratulated Megha Nidhi Dahal for his success.

The Chairman suggested that some prominent members in the area of Engineering and Technology be invited as special invitees for the Governing Body Meetings as and when required. Further, the chairman suggested that another meeting of the Governing Body be convened to discuss only academic and examination related matter.

The Governing Body gave its approval to contact the Head of EI Technologies in connection with the installation of Solar Tech park in the college campus.

The Chairman Sri J.V.Rangaraju suggested that one legal member may be included in all prominent committees.

The Chairman suggested to organize site visits for the students to various ongoing project sites of NCC.

As there was no other matter to discuss, the member secretary thanked the members for their valuable suggestions and solicited their co-operation in all future activities of the institution.

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PRINCIPAL
Nagarjuna College of Engineering & Technology
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1.	Dr. Nagesh Poojary, Lead Technical Architect, Continental Technical Centre, Bengaluru	Experts representing areas such as industry, alumni, R & D institutions, and Technical Education
2.	Mr. R Anish Simha, Senior General Manager, Rinac India Limited, Bengaluru	
3.	Dr. Anil Kannur, HOD-IS	Internal Member

Minutes of 8th Academic Council meeting held on 04-10-2021

Eighth Meeting of Academic Council was held on 04.10.2021 at 10.30 am. The Chairman extended warm welcome to all the members and called the meeting to order. The Chairman sought the permission of the permission to proceed with the agenda.

Agenda		Minutes
08AC-01-21	Confirming minutes of 7th ACM (online) held on 24.09.2020	The minutes of 7th ACM held on 24.09.2020 were read & confirmed and noted the action taken.
08AC-02-21	Implementation of NEP-2020 from the Academic Year 2021-22	• Chairman Dr. Jitendranath Mungara informed the members that as per the directions from VTU and State Government all colleges in Karnataka are to implement NEP-2020 from the Academic year 2021-22. • Chairman highlighted the features of NEP as applicable to engineering education and members asked the questions and get their clarifications from Chairman and Director Dr. S G Gopala Kirshna. • Chairman informed the members that for the first year NCET will adopt the scheme and syllabus as per the guidelines given by VTU and in the higher semesters the curriculum will be modified for which all the members agreed for the same. • Dr. S G Gopala Krishna, Director, informed the members that many of the schemes of NEP such as project based learning, integrated courses, credits for co-curricular activities such as NSS,NCC,Yoga, Sports etc are already implemented at NCET from the academic year 2015-16 itself. • After lengthy discussions, the AC accepted the Implementation of NEP 2020 in principle, for first year UG program from the academic year 2021-22 and recommended to Governing Body for approval.
08AC-03-21	Approval of Scheme and Syllabus for the year	• Chairman informed the members that Meetings of Board of Studies of all the departments were

	2021-22	convened and have recommended to their suggestions to Academic Council for approval • Chairman informed the members that each of the Chairman of BOS will present the recommendation of their BOS meetings to the members after his presentation. • Accordingly, each Chairman of BOS have presented their recommendations to the members of the academic council and sought the approval of scheme and syllabus for the academic year 2021-22. • Dr. Ramesh S, Dr. B Yogesh, VTU nominees have asked about the scheme of Continuous internal assessments(CIE) and process of conduction of SEE, for which Dr. Yogeesha H C & Dr. Sarvesha M V, COE have given the details of the same. • Mr. Sudhahar, industry nominee has informed the members that he is ready to give all support to the institution in extending the consultancy activities. • The academic council has resolved to approve the scheme and syllabus for the academic year 2021-22 presented by respective BoS Chairman. • The AC suggested to be open for incorporating changes in the syllabi, if any, as and when suggested by the members before the commencement of Academic year 2021-22.
08AC-04.2-21	Result Analysis for the academic year 2020-21	• Chairman presented the result analysis of the UG and PG students for the academic year 2020-21. • Members noted that as it is Covid-19 batch, even semester students were passed without the Semester End Examinations and hence were able to attain good results. But in the odd semesters, examinations were held offline & classes were held online and hence there is slight decrease in results. • Academic council suggested to take suitable measures to improve the results of the students.
08AC-05-21	Grants and Project Funding	• Chairman informed the members that the college has received grants and project funding to the tune of Rs. 30 lakhs in the academic year 2020-21 and the AC expressed their happiness regarding the same. • Dr. Venkatesh Babu D L, HOD-Civil informed the members that civil engineering department is undertaking consultancy work in association with NCC Limited for which the members expressed their appreciation.

08AC-06-21	Placement Statistics	• Chairman informed the members that during the academic year 2020-21 placement were improved and many students got campus selected. • Chairman also highlighted that 6th semester students are also got campus placed and in DxC company 102 students got placed. • Academic council members expressed their appreciation for the good number of student placements, • Dr. Ramesh S, VTU nominee asked about maximum package for which Mr. Ravishankar, Head-Placements informed the members that maximum package was Rs. 8.00 lakhs per annnum. • Mr. Mohan, Wipro Limited suggested to improve the placements by providing aptitude training and problem solving skills to the student. Mr. Ravishankar, Head-placements informed the members that NCET is organizing placement training to the students starting from first year itself.
08AC-07-21	Graduation Day and List of graduating students	• The AC accepted the list of both UG and PG graduating students of 2020-2021 batch and recommended to GB for approval to award Provisional Degree certificate by the college and Degree certificate by VTU. • The AC congratulated all the graduating students for the year 2020-21.
08AC-09-21	MOUs and Collaborations	• Mr. Ranjan Manish, Head-Industry Institute Interactions and Incubations, informed the members that NCET has signed MoUs with Blueprism for Robotic Process Automations training and signed MoUs with other industries such as NAASCOM, BCIC, SalesForce, etc and establishing centre of Excellences in association with these industries. • Mr. Ramesh S and Mr. Nijagunarya, VTU Nominees asked about the outcome of the MoUs with the industries. Mr. Ranjan Manish explained the outcome of the MoUs to the members of the Academic Council. • Members of the Academic Council expressed their happiness in connection with Industry Institute interactions and collaborations.
08AC-10-21	Major Activities during the year 2020-21	• Chairman, Dr. Jitendranath Mungara, highlighted the activities organized during the year 2020-21 and informed the members the

		faculty members of Electronics and Communication Engineering department is actively involved in the publications of research papers in reputed journals and patents were applied and granted to the faculty members.
		• Chairman highlighted that two IEEE conferences were organized in the college and many webinars and seminars were organized during the year. Staff and students have attended many online workshops and webinars during the year.
		• Members of the academic council expressed their satisfaction towards the activities of the college during the year and suggested to improve those activities in the next academic year also.

08AC-11-21	Any other matter with the permission of the chair	• Dr. Sarvesha M V, COE & Head-Mathss proposed the changes in regulations as under:
		  o The students writing Summer Term SEE are permitted to optionally carry forward their CIE marks from the previous semesters.
		  o All arrear students are permitted to register to only 2019 scheme irrespective of the old scheme they have studied.
		• AC members discussed the changes to be adopted in the regulations in depth and resolved to approve the above changes.
		• Chairman informed the members that the institution is proposing to start new UG programmes in Cyber Security, Business Intelligence, Systems Engineering, Legal Studies, Agricultural Engineering and Robotics & Automation.
		• Members of the Academic council expressed their appreciation that the college is taking the right steps in promoting engineering education.
		• Chairman, on behalf of the NCET family, thanked the members who retired from the previous Academic Council.
		• Member Secretary thanked the Chairman and all the members for their goodwill, concern, inputs, suggestions, valuable time, contribution and advice for the paramount cause of technical education in general and for the academic growth of NCET in particular. He thanked Shri. Chaitanya Varma, CEO and Mrs. Bhanu Varma and NES Founders for providing continuous guidance to run all our noble institutions very

| | | meaningfully and successfully.. |

Dr. Yogeesha H C
Member Secretary

Dr. Jitendranath Mungara
Chairman & Principal

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Glimpses of Academic Council Meeting held on 4.10.2021

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Third Semester M. Tech- Construction Technology Scheme

Sl. No	Course Code	Course Name	Teaching Department	L-T-P (Hrs/week)	Total Credits	Marks
1.	20CCT31	Energy and Buildings	CV	4-0-0	4	100
2.	20CCT32x	**Elective – 4**	CV	4-0-0	4	100
3.	20CCT33x	**Elective – 5**	CV	4-0-0	4	100
4.	20CCT34	Dissertation Phase 1	CV	0-0-20	10	100
5.	20CCT35	Internship/Term paper/Mini project	CV	0-0-4	3	100
6.	20CCT36	Technical Seminar-II	CV	0-0-4	1	50
Total				**12-0-28**	**26**	**550**
Elective – IV						
1.	20CCT321	Construction Method Statement Procedures				
2.	20CCT322	Pavement Design and Construction				
3.	20CCT323	Building Services and Maintenance				
Elective – V						
1	20CCT331	Construction and Demolition Waste Management				
2	20CCT332	Formwork Design for Structures				
3	20CCT333	Quantitative Methods In Construction				

Fourth Semester M. Tech- Construction Technology Scheme

	Course Code	Course Name	Teaching Department	L-T-P (Hrs/week)	Total Credits	Marks
1	20CCT41	Dissertation Phase II	CV	0-0-14	6	100
2	20CCT42	Dissertation Phase III	CV	0-0-14	6	100
3	20CCT43	Dissertation final Viva Voce	CV	0-0-04	4	100
Total				**0-0-32**	**16**	**300**

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