

NATIONAL ENGINEERING COLLEGE, K.R.NAGAR, KOVILPATTI
(An Autonomous Institution – Affiliated to Anna University Chennai)



THE MINUTES OF THE 9th ACADEMIC COUNCIL

MINUTES OF THE NINETH ACADEMIC COUNCIL MEETING HELD ON 19.05.2018 AT 10.30 A.M. IN THE CONFERENCE HALL OF ADMINISTRATIVE BLOCK, NATIONAL ENGINEERING COLLEGE, KOVILPATTI UNDER THE CHAIRMANSHIP OF Dr.S.SHANMUGAVEL, PRINCIPAL

The following members were present:

Dr.S.Shanmugavel	Principal, National Engineering College
Academic Experts	
Dr.L.Karunamoorthy	Chairman/Dept. of Mechanical, Anna University, Chennai
Dr.M.A.Bhagyaveni	Professor / Dept. of ECE, Anna University, Chennai
Dr.R.Senthil	Professor / Dept. of Civil, Anna University, Chennai
Industrial Experts	
Mr.A.K.Pattabiraman	Head, Accreditation Process for South India, Tata Consultancy Services Limited, Chennai
Dr.V.Veerappan	Cofounder & President, Tessolve Semiconductor Private Limited, Bangalore
Mr.R.Dhamodaran	Sr. Vice President, HCL Services Limited, Chennai
Ms.A.Bhanurekha	Senior Program Manager, WIPRO Limited, Chennai
University Nominees	
Dr. Indra Getzy David	Principal, Government College of Engineering, Tirunelveli
Special Invitees	
Dr.Kn.K.S.K.Chockalingam	Director, National Engineering College
Dr.V.Seenivasagam	Controller of Examinations, National Engineering College

Internal Members	
Dr.K.Manisekar	Dean (Academic), National Engineering College
Dr.K.Kalidasa Murugavel	Prof. & Head / Mechanical, National Engineering College
Dr.D.Ravindran	Prof. / Mechanical, National Engineering College
Dr.A.Shenbagavalli	Prof. & Head / ECE, National Engineering College
Dr.S.Tamilselvi	Prof. & Head / ECE (PG), National Engineering College
Dr.V.Gomathi	Prof. & Head / CSE, National Engineering College
Dr.K.G.Srinivasagan	Prof. / CSE, National Engineering College
Dr.M.Willjuice Iruthayarajan	Prof. & Head / EEE, National Engineering College
Dr.B.Sankaragomathi	Prof. / EIE, National Engineering College
Dr.D.Manimegalai	Prof. & Head / IT, National Engineering College
Dr.C.Puthiyasekar	Prof. & Head / Civil, National Engineering College
Dr.M.A.Neelakandan	Prof. & Head / S & H, National Engineering College
Dr. S.Rammurthy	Prof. / Mathematics, National Engineering College
Dr.L.Kalaivani	Asso. Prof. / EEE, National Engineering College
Dr.S.Sankar Ganesh	Asso. Prof. / IT, National Engineering College
Student Members	
Mr. M.Selva Ganesh	Final year Mechanical
Ms. S.Minu Shruthi	Final year ECE
Ms. M.Bhava Tharani	Final year CSE
Ms. D.R.Divya	Final year EEE
Mr. V.Ramji Kolappan	Final year EIE
Mr. B.Manickam	Final year Civil
Ms. R.Priyadarshini	Final year IT

The Academic Expert member **Dr. T.V.Geetha**, Director/ Academic Courses, Anna University, Chennai, University Nominee members **Dr.V.Abhai Kumar**, Principal, Thiagarajar College of Engineering, Madurai, **Dr.N.G.Ramesh Babu**, Prof. & Head / Bio-Technology, Adhiyamaan College of Engineering, Hosur and Industrial Expert Member **Dr.S.Ganesan**, Additional Director, Combat Vehicles Research and Development

Establishment (CVRDE), Avadi, Chennai could not attend the meeting due to their prior commitments and unavoidable circumstances.

The meeting began with the Principal's (Academic Council Chairman, National Engineering College) welcome address. He outlined briefly the various agenda items to be presented at the meeting. He also described the various committees and Academic meetings held to formulate the structure of the curriculum for the UG degree Programmes offered under Regulation 2019. After the formal welcome, he requested the Director to deliver the Special Address.

The Director while addressing the Council highlighted that the designing of curriculum under Regulation 2019 would be discussed in the Academic Council.

Following the address by the Director, the Dean (Academic) moved the following agenda items on behalf of the Principal.

The following agenda items are considered and approved by the 09th Academic Council

DA 09.01 TO CONFIRM THE MINUTES OF EIGHTH ACADEMIC COUNCIL MEETING HELD ON 02nd DECEMBER 2017

The minutes of the **Eighth Academic Council meeting** held on **02/12/2017** were communicated to the members vide **Email dated 11/12/2017**. The comments received have been incorporated and placed for confirmation. The same was approved by the council.

- Minutes of 08th Academic Council
- Action taken report for minutes of 08th Academic Council

DA 09.02 TO CONSIDER AND APPROVE THE AMENDMENTS TO CLAUSE 4.6, 6.2, 7.5 and 15.1 OF REGULATIONS 2015 FOR UG DEGREE PROGRAMMES OF NATIONAL ENGINEERING COLLEGE

RESOLVED TO APPROVE the amendments to CLAUSE 4.6, 6.2, 7.5 and 15.1 of Regulations 2015 for UG degree programmes of National Engineering College.

- AMENDMENTS – UG REGULATIONS 2015

DA 09.03 TO CONSIDER AND APPROVE TO HOLD SPECIAL EXAMINATIONS FOR STUDENTS THOSE WHO MISSED THEIR PAPERS DURING END SEMESTER EXAMINATIONS OWING TO THEIR PARTICIPATION IN SPORTS, NCC & NSS EVENTS FROM THE ACADEMIC YEAR 2018-2019 ONWARDS

RESOLVED TO APPROVE to hold special examinations for those students who missed their end semester examinations owing to their participation in national and international level Sports, NCC & NSS events from the academic year 2018-2019 onwards and also to implement after due consideration by standing committee of Academic Council

DA 09.04 TO CONSIDER AND APPROVE THE STRUCTURE OF THE PROGRAMME UNDER REGULATION 2019 AS PER AICTE CURRICULUM MODEL

RESOLVED TO APPROVE the structure of the programme under Regulation 2019 as per AICTE curriculum model

➤ **Curriculum structure under R-2019**

DA 09.05 TO CONSIDER AND APPROVE TO SWAP THE FOLLOWING COURSES IN THE ODD SEMESTER TO EVEN SEMESTER AND VICE VERSA FOR THE BRANCHES ECE, CSE AND EEE FOR ADMINISTRATIVE REASONS UNDER R-2015

Course Code / Course Title	Purpose
15SH16C / Engineering Graphics	Swap from 1 st semester to 2 nd semester
15SH18C / Engineering Practice Laboratory	
15EC25C / 15CS25C / 15EE25C C Programming for Engineers	Swap from 2 nd semester to 1 st semester
15EC28C / 15CS28C / 15EE28C C Programming Laboratory	

RESOLVED TO APPROVE to swap the courses in the odd semester to even semester and vice versa for the branches ECE, CSE and EEE for administrative reasons under R-2015

BUSINESS BROUGHT FORWARD BY THE BOARD OF STUDIES**AGENDA FROM DEPARTMENT OF MECHANICAL ENGINEERING**

Dr. K.Kalidasa Murugavel, Chairman, Mechanical Engineering moved the following items based on the decision of the Board of Studies in Mechanical Engineering.

- ME 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

- **B.E. MECHANICAL ENGG. – Curriculum**

- ME 09.02 TO CONSIDER AND APPROVE THE END SEMESTER EXAMINATION EVALUATION SCHEME OF THE ELECTIVE COURSE 15ME38E – ADVANCED MODELING TECHNIQUES FOR THE UG DEGREE PROGRAMMES TO BE OFFERED UNDER R-2015**

RESOLVED TO APPROVE the end semester examination evaluation scheme of the elective course 15ME38E – Advanced Modeling Techniques for the UG degree programmes to be offered under R-2015

- **15ME38E – ADVANCED MODELING TECHNIQUES – Scheme**

AGENDA FROM DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Dr. A.Shenbagavalli, Chairman, Electronics and Communication Engineering moved the following items based on the decision of the Board of Studies in Electronics and Communication Engineering.

- EC 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

- **B.E. ECE – Curriculum**

EC 09.02 TO CONSIDER AND APPROVE THE INTRODUCTION OF ADDITIONAL ELECTIVE COURSES IN CURRICULUM FOR PG DEGREE PROGRAMME TO BE OFFERED UNDER R-2015

RESOLVED TO APPROVE the introduction of additional elective courses in curriculum for PG degree programme to be offered under R-2015

➤ **M.E. EST – Introduction of Elective courses**

AGENDA FROM DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Dr. V.Gomathi, Chairman, Computer Science and Engineering moved the following items based on the decision of the Board of Studies in Computer Science and Engineering.

CS 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

➤ **B.E. CSE – Curriculum**

AGENDA FROM DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Dr. M.Willjuice Iruthayarajan, Chairman, Electrical and Electronics Engineering moved the following items based on the decision of the Board of Studies in Electrical and Electronics Engineering.

EE 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

➤ **B.E. EEE – Curriculum**

AGENDA FROM DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

Dr. B.Sankaragomathi, Chairman, Electronics and Instrumentation Engineering moved the following items based on the decision of the Board of Studies in Electronics and Instrumentation Engineering.

EI 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

➤ **B.E. EIE – Curriculum**

AGENDA FROM DEPARTMENT OF CIVIL ENGINEERING

Dr. C.Puthiyasekar, Chairman, Civil Engineering moved the following items based on the decision of the Board of Studies in Civil Engineering.

CE 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

➤ **B.E. CIVIL – Curriculum**

AGENDA FROM DEPARTMENT OF INFORMATION TECHNOLOGY

Dr.D.Manimegalai, Chairman, Information Technology moved the following items based on the decision of the Board of Studies in Information Technology.

IT 09.01 TO CONSIDER AND APPROVE THE CURRICULUM FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019

RESOLVED TO APPROVE the curriculum for UG degree programmes to be offered under R-2019

➤ **B.Tech. IT – Curriculum**

ANY OTHER ITEMS, WITH THE PERMISSION OF THE CHAIRMAN OF THE ACADEMIC COUNCIL

The Principal informed the members of the academic council regarding the achievement of the institution and efforts taken to enhance the EDC activities as listed below:

- Entrepreneurship Development Cell was established in the year 2013
- NEC established a Nonprofit Section (8) company " K R Innovation Centre" to Promote Business Incubator activities and Entrepreneurship Cell activities
- NEC is a Host Institute for MSME, New Delhi approved Business Incubator. Through this new Innovative Eco system was developed and five Alumnea (incubates) have been funded for 29.39 Lakhs during the year 2016-2017 for the development of five Products
- Institution is approved as **New Generation Innovation and Entrepreneur Development Centre** supported by **NSTEDB and- DST, New Delhi**. Through this, the institution can Support 85 Projects to the worth of 2.5 lakh/project over a period of 5 years (2017 – 2022) with the total funding of Rs 2.87 Crores
- Two Students Startups 1.**Goldenwelkin** and 2.**Suvadi** have been established in the Campus (NEC-Business Incubator)
- Two of our students (**Mr. Veera Shanthi Ram.M** Final Year EIE – **Coconut Grading Machine** and **Mr. Muthu Mariappan.K** CSE/ Alumni-**Castalk**) participated in the **Falling Walls Lab India 2018** on 7th April 2018 organized by Jadavpur University Kolkata and the DAAD - German Academic Exchange Service and DWIH - German House for Research and Innovation New Delhi.
- The Falling Walls Lab India took place at Jadavpur University, Kolkata on 7th April 2018. Sixteen finalists from across the country selected through a rigorous process presented their top notch research and entrepreneurial ideas on themes as varied as but not limited to water problems, climate change, energy conservation, disabilities and impairments, cancer and other diseases, effective processing and production etc.

- **Veera Shanthi Ram M** was adjudged the winner of the Lab. He will represent India to complete with Falling Walls Lab winners from across the world at the global Lab finale that takes place in Berlin on 8th November 2018, and also gets a ticket to the prestigious Falling Walls conference on 9th November where leaders from science, industry and policy-making meet. The trip to Berlin financed by DWIH – German House for Research and Innovation New Delhi.



- NEC Business Incubator Cell has partnered with EDII Ahmedabad for organizing the National Level Startup Summit programme "Empresario Startup Summit 2018" on 10th & 11th March 2018 in EDII, Ahmedabad. In that, the following students of our institution participated in various events conducted by them.



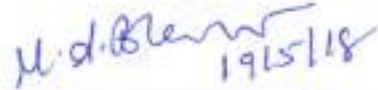







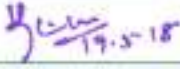
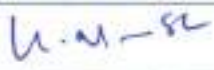


S. No.	Student Members	Purpose
1.	H. Muthu Mariappan	Business Plan
2.	K.R. Praveen Krishna	Campus Ambassador, Prototype Funding
3.	S. Robhin Ponarasu	Business Plan
4.	D. Venkatesh	Business Plan
5.	R. Ramesh kumar	Prototype Funding
6.	S. Manivannan	Prototype Funding
7.	S. Shunmuga Sundaram	Big Pitch 2.0
8.	S. Mariya Austin	Big Pitch 2.0

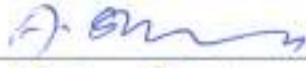


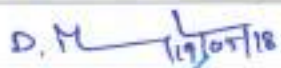






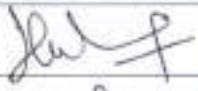




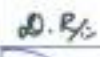

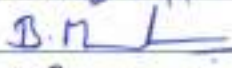
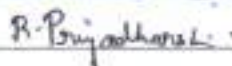
- Our student Mr. **K.R.Praveen Krishna** of second year Mechanical was selected as one of the best Campus Ambassadors of the programme

Points suggested by the Academic Council

1. To maintain the ratio of practical and theoretical courses as 30% and 70% in the curriculum respectively.
Appreciated the efforts of Chairmans of various Board of studies for the inclusion of the following courses in the curriculum.
 - Agile technology
 - Automation
 - Deep learning
 - Internet of things
 - Cloud computing and
 - Computer engineering and business system.
4. For Electronic Measurement Laboratory course, one theory hour may be given.
5. IT workshop can be shifted to 2nd semester in CSE dept.
6. For core courses, there is no need to change the standard course name.
7. For internship, a minimum of 4 weeks to be allotted.
8. Total number of credit may be fixed as 165 for all the programmes.
9. Common curriculum and credit should be followed in first semester. Common courses for all the programmes may be named as same.
10. Comprehension lab may be shifted to 6th semester in all the programmes.
11. For CSE department, discrete structures course may be renamed as discrete mathematics.
12. Appreciated the Management, Director, Principal and faculties for taking efforts taken to improve the entrepreneurship and product development activities in the campus.

Members Present

Dr.S.Shanmugavel Academic Council Chairman National Engineering College	
Academic Experts	
Dr.L.Karunamoorthy Chairman / Faculty of Mechanical Engineering Anna University, Chennai - 25	
Dr.M.A.Bhagyaveni Professor / Dept. of Electronics and Communication Engineering Anna University, Chennai - 25	
Dr.R.Senthil Professor / Dept. of Civil Engineering Anna University, Chennai - 25	
Industrial Experts	
Mr.A.K.Pattabiraman Head, Accreditation Process for South India, Tata Consultancy Services Limited Chennai - 96	
Dr.V.Veerappan Cofounder & President, Tessolve ^{Semiconductor} Services Private Limited, Bangalore	
Mr.R.Dhamodaran Sr. Vice President HCL Services Limited, Chennai - 34	
Ms.A.Bhanurekha Senior Program Manager WIPRO Limited, Chennai - 32	
University Nominees	
Dr. Indra Getzy David Principal, Government College of Engineering Tirunelveli - 07	
Special Invitees	
Dr.Kn.K.S.K.Chockalingam Director	
Dr.V.Seenivasagam Controller of Examinations	
Internal Members	
Dr.K.Manisekar Prof. & Dean (Academic)	
Dr.K.Kalidasa Murugavel Prof. & Head / Mechanical	
Dr.D.Ravindran Prof. / Mechanical	

Dr.A.Shenbagavalli Prof. & Head / ECE	
Dr.S.Tamilselvi Prof. & Head / ECE(PG)	 19/5/18
Dr.V.Gomathi Prof. & Head / CSE	 19/5/18
Dr.D.Manimegalai Prof. & Head / IT	 19/5/18
Dr.K.G.Srinivasagan Prof. / CSE	
Dr.M.Willjuice Iruthayarajan Prof. & Head / EEE	 19/5/18
Dr.B.Sankaragomathi Prof. / EIE	 19/5/18
Dr.C.Puthiyasekar Prof. & Head / Civil	 19/5/18
Dr.M.A.Neelakandan Prof. & Head / S & H	
Dr. S.Rammurthy Prof. / Mathematics	 19/5/18
Dr.L.Kalaivani Prof. / EEE	
Dr.S.Sankar Ganesh Asso. Prof. / IT	
Student Members	
Mr. M.Selva Ganesh, Final year Mechanical	 M. Selva Ganesh
Ms. S.Minu Shruthi, Final year ECE	 S. Minu Shruthi
Ms. M.Bhava Tharani, Final year CSE	 M. Bhavatharani
Ms. D.R.Divya, Final year EEE	 D.R.
Mr. V.Ramji Kolappan, Final year EIE	 V. Ramji Kolappan
Mr. B.Manickam, Final year Civil	 B. Manickam
Ms. R.Priyadarshini, Final year IT	 R. Priyadarshini


CHAIRMAN
ACADEMIC COUNCIL

NATIONAL ENGINEERING COLLEGE, K.R.NAGAR, KOVILPATTI*(An Autonomous Institution – Affiliated to Anna University Chennai)***Actions Taken Report on Minutes of 8th Academic Council Meeting**

S. No.	Action Initiated	Action Taken
1.	Amendments to clause 5.1, 11.1.1., 11.3.1, 11.11 and 17.0 of R-2015 for UG degree programmes	Implemented except clause 11.1.1 (Supplementary Examination)
2.	The introduction of LIVE-IN-LAB in structure of the curriculum for UG degree programmes	Implemented. For Swachh Bharat Abhiyan activities two villages Nalattinputhur and Thonukai were selected by the NSS. Through this, students will participate in the overall cleanliness and in setting up systems for sustainable development of the village. This programme will be conducted during May 1 st – July 31 st 2018. This will be considered as summer internship for those who have participated.
3.	The introduction of NON-CGPA course on critical and creative thinking for UG degree programme	Made it compulsory in R-2019
4.	The refinement of course outcomes for the UG degree programmes to be offered under R-2015 of Mechanical Engg	Implemented
5.	The additional elective course 15ME44E – NEW PRODUCT DEVELOPMENT for the UG degree programmes to be offered under R-2015	Implemented
6.	The additional elective course 15EN27E – DESIGN OF EXPERIMENTS for the M.E. – ENERGY ENGINEERING programme to be offered under R-2015	Implemented
7.	The incorporation and modification of one credit courses for the UG degree programmes to be offered under R-2015 of B.E. – ECE	Implemented
8.	The incorporation and modification of one credit courses for the UG degree programmes to be offered under R-2015 of B.E. – CSE	Implemented
9.	The incorporation and modification of one credit courses for the UG degree programmes to be offered under R-2015 of B.E. – EEE	Implemented

S. No.	Action Initiated	Action Taken
10.	The incorporation and modification of one credit courses for the UG degree programmes to be offered under R-2015 of B.E.-EIE	Implemented
11.	The incorporation and modification of one credit courses for the UG degree programmes to be offered under R-2015 of B.E. – Civil Engg.	Implemented
12.	The incorporation and modification of one credit courses for the UG degree programmes to be offered under R-2015 of B.Tech. – IT	Implemented

Minutes of 8th AC Meeting – Suggestions given by Expert Members

S. No.	Suggestions given by Expert members	Action Taken
1.	To include value engineering in the syllabus of the course " New product development " and to try to get the support from industry for conducting such course.	Proposed to include in the forthcoming academic year onwards. It is also decided to handle part of the course by our faculty and the important portion by industrial experts through lecture or video conferencing.
2.	To make the course "Research Methodology" as a compulsory one for all the PG students.	It is made compulsory for all the research scholars. Research paper and patent review seminar is compulsory for all the PG students
3.	For PCB design course, a separate "FAB" lab may be established and the course must be offered for all circuit branch (EEE, EIE and ECE) students.	Efforts have been taken through NewGen IEDC / Department of ECE
4.	To conduct the courses Gamification and Enterprise IOT as practical courses.	Enterprise IOT modified as practical course for CSE department
5.	To setup IOT Laboratory for conducting courses and for product development.	A separate IOT laboratory is to be established at KR Innovation Centre
6.	To give due importance for topics like Automation, Artificial Intelligence, Deep Learning and Machine Learning courses while designing the curriculum in the forthcoming regulations.	Efforts have been taken to include in the forthcoming regulations
7.	To take care while designing the curriculum for CSE and IT in order to differentiate the field of specialization for both programmes in the forthcoming regulation.	Action is being taken to differentiate the specialization for CSE & IT programmes. This will be discussed during the presentation of IT curriculum

AMENDMENTS IN REGULATIONS 2015
(9th Academic Council Meeting on 19.05.2018)

UNDER GRADUATE DEGREE PROGRAMMES	
Existing UG Regulations – 2015	Amended UG Regulations – 2015
<p>4.0 STRUCTURE OF THE PROGRAMME</p> <p>4.6 Online Courses/Self Study Courses</p> <p>Students may be permitted to earn credit through online courses (which are provided with certificate) with the approval of Head of the Department and Dean academic subject to a maximum of three credits. The Student needs to obtain certification to become eligible for writing end semester examination to be conducted by the Institution under autonomous status. In case of credits earned through on line mode from a university with approval of Head of the Department and Dean Academic, the credit may be transferred with the due approval procedures from the Performance Analysis Committee</p>	<p>4.0 STRUCTURE OF THE PROGRAMME</p> <p>4.6 Online Courses/Self Study Courses</p> <p>Students may be permitted to earn credit through online courses (which are provided with certificate) with the approval of Head of the Department and Dean academic subject to a maximum of three credits. The credit may be transferred with the due approval procedures as per clause 15 (ii) for either core or elective course. However, the course for which he/she is requesting credit transfer should not be handled by the department concerned in that particular semester.</p>
<p>6.0 REGISTRATION</p> <p>6.2 Every student shall enroll for the courses of the succeeding semester during the last week of the current semester. However, the student shall confirm the enrollment by registering for the courses within first five working days after the commencement of the concerned semester.</p>	<p>6.0 REGISTRATION</p> <p>6.2 Every student shall enroll for the courses of the succeeding semester during the last week of the current semester. However, the student shall confirm the enrollment by registering for the courses within first five working days after the commencement of the concerned semester. Further, the student has to register for the end semester examination by paying the prescribed fee for that particular course. If he/she has not registered for the end semester</p>

UNDER GRADUATE DEGREE PROGRAMMES	
Existing UG Regulations – 2015	Amended UG Regulations – 2015
	examination in the semester concerned, then he/she has to re-register for the courses in the subsequent semesters and satisfy the requirements as per clauses 7.0 & 6.10.2
<p>7.0 REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE</p> <p>7.5 NIL</p>	<p>7.0 REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE</p> <p>7.5 Students who have not satisfied the attendance requirements as per Clauses 7.1 & 7.2 and registration requirements as per the clause 6.2 in all the courses in a particular semester have to re-do the courses in the corresponding semester in the subsequent academic years subject to clause 20.1. Also, such students are not eligible to register for the subsequent semester. This will come into effect from the academic year 2018 - 2019 onwards.</p>
<p>15.0 AWARD OF LETTER GRADES</p> <p>15.1 iv. NIL</p>	<p>15.0 AWARD OF LETTER GRADES</p> <p>15.1</p> <p>iv. For converting the marks obtained in the online courses into letter grade and grade points, the procedure detailed in clauses 15(ii) & (iii) & Table-13 shall be followed. For this purpose, the maximum and minimum marks awarded for passing requirement shall be obtained from the agency which conducts the online courses.</p>

CREDIT DISTRIBUTION OF UNDERGRADUATE ENGINEERING PROGRAM

S. No	Category	BREAKUP OF CREDITS (R-2019)													
		Mech		ECE		CSE		EEE		EIE		IT		CIVIL	
		AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC
1.	Humanities and Social Sciences including Management courses	12	13	12	10	12	10	12	10	12	10	12	12	12	11
2.	Basic Science courses	25	25	25	25	25	26	26	25	25	27	24	24	26	26
3.	Engineering Science courses including Workshop, Drawing, Basics of Electrical / Mechanical / Computer Engg., etc	24	26	24	22	24	25	20	22	24	22	29	28	29	31
4.	Professional Core courses	48	51	48	55	48	55	53	63	48	53	49	48.5	47	56
5.	Professional Elective courses relevant to chosen specialization / branch	18	18	18	21	18	16	18	15	18	18	18	22.5	23	21
6.	Open Subjects - Elective from other technical and / or emerging	18	18	18	15	18	16	18	15	18	15	12	10	11	6
7.	Project work, seminar and internship in industry or elsewhere	15	14	15	14	15	15	11	14	15	15	15	15	12	12
8.	Mandatory courses (Environmental sciences, Induction training, Indian constitution, Essence of Indian Traditional Knowledge)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
9.	Comprehension														2
10.	One Credit Courses														
11.	Online Courses														
12.	Live-in Lab														
TOTAL		160	165	160	162	160	163	158	164	160	160	159	160	160	165

Sl. No	Category		BREAKUP OF CREDITS (R-2019)																				
			Mech			ECE			CSE			EEE			EIE			IT			CIVIL		
			AICTE	NEC		AICTE	NEC		AICTE	NEC		AICTE	NEC		AICTE	NEC		AICTE	NEC		AICTE	NEC	
1.	Humanities and Social Sciences including Management courses	English Humanities Social Science	12	7 5 1	13	12	5 3 2	10	12	5 3 2	10	12	5 3 2	10	12	5 3 2	12	5 5 2	12	12	5 3 3	11	
2.	Basic Science courses		25	25		25	25		25	26		26	25		25	27		24	24		26	26	
3.	Engineering Science courses including Workshop, Drawing, Basics of Electrical / Mechanical / Computer Engg., etc		24	26		24	22		24	25		20	22		24	22		29	28		29	31	
4.	Professional Core courses		48	51		48	55		48	55		53	63		48	53		49	48.5		47	56	
5.	Professional Elective courses relevant to chosen specialization / branch		18	18		18	21		18	16		18	15		18	18		18	22.5		23	21	
6.	Open Subjects - Elective from other technical and / or emerging		18	18		18	15		18	16		18	15		18	15		12	10		11	6	
7.	Project work, seminar and internship in industry or elsewhere	Product Development Mini Project Project Work Seminar Internship	15	2 3 6 1 2	14	15	2 4 6 - 2	14	15	2 4 6 1 2	15	11	2 3 6 1 2	14	15	2 4 6 1 2	15	15	2 4 6 1 2	15	12	- 4 6 - 2	12

CREDIT DISTRIBUTION OF BASIC SCIENCE COURSES

Subject	MECH	ECE	CSE	EEE	EIE	IT	CIVIL
	Credit	Credit	Credit	Credit	Credit	Credit	Credit
Mathematics	12	14	12	12	16	11	10
Engineering Physics	6	2	4	4	4	4	3
Engineering Chemistry	6	4	4	4	4	4	3
Physics and Chemistry Lab	2	3	3	3	3	3	1
Biology	3 (OEC)	2	3	2	2 (ESC)	2	3
Related to the Program							6

SEMESTER-WISE CREDIT BREAKUP

Semester	MECH		ECE		CSE		EEE		EIE		IT		CIVIL	
	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC	AICTE	NEC
I	17.5	18	17.5	17.5	17.5	23	17.5	18	17.5	17.5	17.5	23.5	17.5	21
II	20.5	19	20.5	22.5	20.5	20.5	20.5	17.5	20.5	18	20.5	18.5	20.5	23
III	23	23	20	22	23	23	20	24	20	22	23	23	22	23
IV	19	21	20	18.5	22	23.5	22	21.5	20	23	22	20	23	22
V	20.5	22	20	22.5	21	23	21	22.5	20	22.5	21	21.5	23	20
VI	21.5	22	20	24	22	22	22	28	20	23	22	21	23	21
VII	18.5	25	21	23	18	19	18	24.5	21	23	18	23.5	15	24
VIII	18	15	21	12	15	9	17	8	21	11	15	9	16	11
Total	158.5	165	160	162	159	163	158	164	160	160	159	160	160	165