

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

**18<sup>th</sup> ACADEMIC COUNCIL MEETING**

**Venue: Conference Hall of the Administrative Block  
National Engineering College, Kovilpatti**

**Date: 07.01.2023**

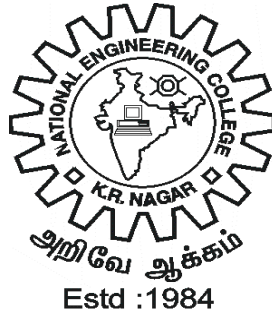
**Time: 10.30 AM**

**AGENDA**

- ❧ WELCOME ADDRESS – Dr.K.Kalidasa Murugavel, Chairman
- ❧ SPECIAL ADDRESS – Dr.S.Shanmugavel, Director
- ❧ Brief Presentation about the Academic Process
- ❧ Confirmation of Minutes of 17<sup>th</sup> Academic Council Meet
- ❧ Discussion – to amend clause 4.5 of UG Degree programmes under R-2019 - Internship / Inplant Training
- ❧ Discussion – to amend clause 4.8 of UG Degree programmes under R-2019 – Project work / Industry Practice
- ❧ Discussion - to amend clause 11.2 of UG Degree programmes under R-2019
  - EVALUATION OF THE COURSES (For the batches admitted during 2019 – 2020 and 2020 - 2021 only)
  - EVALUATION OF THE COURSES (For the batch admitted from 2021 – 2022 onwards)
- ❧ Discussion - to amend clause 12.5.5 of UG Degree programmes under R-2019 – Industry Practice
- ❧ Discussion of R-2019 UG Degree programmes Award of
  - B.E. / B.Tech. – Honors
  - B.E. / B.Tech. – Honors with specialization
  - B.E. / B.Tech. – Minor Degree
- ❧ Approval - Break of Study of Ms.S.Sahana (Reg. No. 2112042) Second year of B.E. – Computer Science and Engineering
- ❧ Approval - Verticals for awarding Honors, Honors with specialization and Minor degree
- ❧ Approval for remaining Elective courses and One credit courses for UG degree programmes under R-2019
- ❧ ANY OTHER MATTER
- ❧ VOTE OF THANKS

*Legi  
b/11*

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



**THE MINUTES OF THE 18<sup>th</sup> ACADEMIC COUNCIL**

MINUTES OF THE 18<sup>th</sup> ACADEMIC COUNCIL MEETING HELD ON **07.01.2023**  
AT **10.30 A.M.** IN THE CONFERENCE HALL OF ADMINISTRATIVE BLOCK, NATIONAL  
ENGINEERING COLLEGE, KOVILPATTI UNDER THE CHAIRMANSHIP OF  
**Dr.K.KALIDASA MURUGAVEL**, PRINCIPAL

The following are the academic council members:

Dr.K.Kalidasa Murugavel	Principal, National Engineering College
<b>Academic Experts</b>	
Dr.P.Alagu Sundaramoorthy	Professor / Dept. of Civil Engineering, IITM, Chennai
Dr.V.Sankaranarayanan	Professor / Department of EEE, NIT, Trichy
Dr.R.Saravanan	Professor, Department of Mechanical Engineering, Anna University, Chennai
Dr.S.Swamynathan	Professor, Dept. of Information Science and Technology, Anna University, Chennai
<b>Industrial Experts</b>	
Dr.V.Veerappan	Cofounder & President, Tessolve Semiconductor Limited, Bangalore
Mr.Gurusamy S V	Chairman cum Managing Director, Elite Engineering & Construction (Hyd) Pvt. Ltd., Gachibowli, Hyderabad
Mr.N.Lakshmi Narasimhan	General Manager – HR, Brakes India Private Limited, Chennai
Mr.S.Suresh	Senior Vice President & Business Head, Wheels India Limited, Chennai
Mr. Senthil Ramalingam	<i>Senior Director - Enterprise Engineering &amp; Digital Experience at Cognizant Technology Services, Coimbatore</i>

Mr.Ramanathan Arunachalam	Director – Products with Magellan X, Feather lite work space, 200 Ft. Radial Road, Pallavaram, Chennai
Mr.Srikanth S Valuthur	CXO Level Professional / Top Management Executive, Hybrid Cloud Services, IBM Consulting, APAC, Chennai
<b>University Nominees</b>	
Dr. M.Vijayaraj	Professor & Head, Department of Electronics and Communication Engineering, Government College of Engineering, Tirunelveli
Dr. K.Linga Durai	Professor & Dean, Anna University Regional Campus, Kanyakumari National Highway, Madurai
Dr.G.Kumaraguruparan	Professor, Department of Mechatronics, Thiagarajar College of Engineering, Madurai
<b>Special Invitees</b>	
Dr.S.Shanmugavel	Director, National Engineering College
Dr.D.Manimegalai	Controller of Examinations, National Engineering College
<b>Internal Members</b>	
Dr.M.A.Neelakantan	Sr. Dean (IFA) & Head / S & H, National Engg. College
Dr.K.G.Srinivasagan	Dean (TCP) / Head / IT, National Engineering College
Dr.K.Manisekar	Dean (I & E) & Head / Mechanical, National Engg College
Dr.A.Shenbagavalli	Prof. & Head / ECE, National Engineering College
Dr.V.Gomathi	Prof. & Head / CSE, National Engineering College
Dr.M.Willjuice Iruthayarajan	Prof. & Head / EEE, National Engineering College
Dr.C.Puthiyasekar	Prof. & Head / Civil, National Engineering College
Dr.V.Kalaivani	Prof. & Head / AI & DS, National Engineering College
Dr.S.Rammurthy	Prof. / Mathematics, National Engineering College
Dr.K.Mohaideen Pitchai	Prof. / CSE, National Engineering College
Dr.R.V.Maheswari	Prof. / EEE, National Engineering College
Dr.T.S.Arun Samuel	Prof. / ECE, National Engineering College
Dr.V.Kannan	Asso. Prof. / Civil, National Engineering College
Dr.D.Vignesh Kumar	Asst. Prof. (SG) / Mechanical, National Engg. College
<b>Student Members</b>	
Mr.T.Anandhavel	Final year Mechanical
Mr.M.S.Bala Ayyappan	Third year ECE
Ms.S.Suji	Final year CSE

Ms.P.Apsara Vahini	Third year EEE
Mr.A.Anandh	Final year IT
Mr. M.Sriram	Final year Civil

The Industrial expert members **Mr.N.Lakshmi Narasimhan**, General Manager – HR, Brakes India Private Limited, Chennai, **Mr.S.Suresh**, Senior Vice President & Business Head, Wheels India Limited, Chennai and **Mr. Senthil Ramalingam**, Senior Director - Enterprise Engineering & Digital Experience at Cognizant Technology Services, Coimbatore could not attend the meeting due to their prior commitments and unavoidable circumstances.

The meeting began with the welcome address by the Principal, Chairman, Academic Council, National Engineering College. He outlined briefly the academic process in the institution and various agenda items to be presented in the meeting. Following the address by the Principal, the Dean (Academic) moved the following agenda items on behalf of the Principal.

The following agenda items are considered and approved by the 18<sup>th</sup> Academic Council

**DA 18.01 TO CONFIRM THE MINUTES OF SEVENTEENTH ACADEMIC COUNCIL MEETING HELD ON 26<sup>th</sup> JULY 2022**

The minutes of the **17<sup>th</sup> Academic Council meeting** held on **26/07/2022** were communicated to the members vide **Email dated 28/07/2022**. The comments received have been incorporated and placed for confirmation. The same was approved by the council.

- **Minutes of 17<sup>th</sup> Academic Council**
- **Action taken report for minutes of 17<sup>th</sup> Academic Council**

**DA 18.02 TO CONSIDER AND APPROVE THE AMENDMENTS TO CLAUSE 4.5, 4.8, 4.11, 6.10.2, 11.2, 12.5.5 AND 15.0 OF REGULATIONS 2019 FOR UG DEGREE PROGRAMMES OF NATIONAL ENGINEERING COLLEGE**  
**RESOLVED TO APPROVE** the amendments to Clause 4.5, 4.8, 4.11, 6.10.2, 11.2, 12.5.5 and 15.0 of Regulations 2019 for UG degree programmes of National Engineering College

- **AMENDMENTS OF REGULATIONS FOR UG (R-2019)**

**DA 18.03 TO CONSIDER AND APPROVE THE AMENDMENTS TO CLAUSE 12.4.1 OF REGULATIONS 2019 FOR PG DEGREE PROGRAMMES OF NATIONAL ENGINEERING COLLEGE**

**RESOLVED TO APPROVE** the amendments to Clause 12.4.1 of Regulations 2019 for PG degree programmes of National Engineering College

➤ **AMENDMENTS OF REGULATIONS FOR PG (R-2019)**

**DA 18.04 TO CONFIRM AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019.**

**RESOLVED TO APPROVE** Verticals for awarding Honours, Honours with specialization and Minor degree under Regulation 2019.

**BUSINESS BROUGHT FORWARD BY THE BOARD OF STUDIES**

**AGENDA FROM DEPARTMENT OF MECHANICAL ENGINEERING**

The Standing Committee of the Academic Council recommends, **Dr. K.Manisekar, Chairman, Mechanical Engineering** moves the following items based on the decision of the Board of Studies in Mechanical Engineering.

**ME 18.01 TO CONSIDER AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019**

**RESOLVED TO APPROVE** Verticals for awarding Honours, Honours with Specialization and Minor Degree under Regulation 2019

**ME 18.02 TO CONSIDER AND APPROVE THE PROFESSIONAL ELECTIVE COURSES FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the professional elective courses for UG degree programme to be offered under R-2019

➤ **B.E. MECHANICAL – LIST OF COURSES**

**ME 18.03 TO CONSIDER AND APPROVE THE ADDITIONAL ELECTIVE COURSES FOR PG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the additional elective courses for PG degree programme to be offered under **R-2019**

➤ **M.E. ENERGY ENGINEERING – LIST OF COURSES**

**AGENDA FROM DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

The Standing Committee of the Academic Council recommends, **Dr.A.Shenbagavalli, Chairman, Electronics and Communication Engineering** moves the following items based on the decision of the Board of Studies in Electronics and Communication Engineering.

**EC 18.01 TO CONSIDER AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019**

**RESOLVED TO APPROVE** Verticals for Awarding Honours, Honours with Specialization and Minor Degree under Regulation 2019

**EC 18.02 TO CONSIDER AND APPROVE THE ADDITIONAL ELECTIVE COURSE SYLLABUS FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the additional elective course syllabus for UG degree programme to be offered under R-2019

➤ **B.E. ECE - Elective Course Syllabus**

**AGENDA FROM DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

The Standing Committee of the Academic Council recommends, **Dr. V.Gomathi, Chairman, Computer Science and Engineering** moves the following items based on the decision of the Board of Studies in Computer Science and Engineering.

**CS 18.01 TO CONSIDER AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019**

**RESOLVED TO APPROVE** Verticals for Awarding Honours, Honours with Specialization and Minor Degree under Regulation 2019

**CS 18.02 TO CONSIDER AND APPROVE THE ADDITIONAL ELECTIVE COURSE SYLLABUS FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the additional elective course syllabus for UG degree programme to be offered under R-2019

➤ **B.E. CSE - Elective Course Syllabus**

**CS 18.03 TO CONSIDER AND APPROVE THE ADDITIONAL ELECTIVE COURSE SYLLABUS FOR PG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the additional elective course syllabus for PG degree programme to be offered under R-2019

➤ **M.E. CSE - Elective Course Syllabus**

### **AGENDA FROM DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

The Standing Committee of the Academic Council recommends, **Dr. M.Willjuice Iruthayarajan, Chairman, Electrical and Electronics Engineering** moves the following items based on the decision of the Board of Studies in Electrical and Electronics Engineering.

**EE 18.01 TO CONSIDER AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019**

**RESOLVED TO APPROVE** Verticals for Awarding Honours, Honours with Specialization and Minor Degree under Regulation 2019

**EE 18.02 TO CONSIDER AND APPROVE THE ELECTIVE COURSE SYLLABUS FOR INCORPORATING VERTICALS FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the elective course syllabus for incorporating verticals for UG degree programme to be offered under R-2019

➤ **B.E. EEE – Elective Course Syllabus**

**AGENDA FROM DEPARTMENT OF INFORMATION TECHNOLOGY**

The Standing Committee of the Academic Council recommends, **Dr.K.G.Srinivasagan, Chairman, Information Technology** moves the following items based on the decision of the Board of Studies in Information Technology.

**IT 18.01 TO CONSIDER AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019**

**RESOLVED TO APPROVE** Verticals for Awarding Honours, Honours with Specialization and Minor Degree under Regulation 2019

**IT 18.02 TO CONSIDER AND APPROVE THE Refinement of SECOND SEMESTER COURSES For B.Tech AI & DS FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**

**RESOLVED TO APPROVE** the Refinement of Second Semester Courses for B.Tech AI & DS for UG degree programme to be offered under R-2019

➤ [B.Tech. AI & DS – Course Syllabus](#)

**AGENDA FROM DEPARTMENT OF CIVIL ENGINEERING**

The Standing Committee of the Academic Council recommends, **Dr.C.PUTHIYA SEKAR, Chairman, Civil Engineering** moves the following items based on the decision of the Board of Studies in Civil Engineering.

**CE 18.01 TO CONSIDER AND APPROVE VERTICALS FOR AWARDING HONOURS, HONOURS WITH SPECIALIZATION AND MINOR DEGREE UNDER REGULATION 2019**

**RESOLVED TO APPROVE** Verticals for Awarding Honours, Honours with Specialization and Minor Degree under Regulation 2019

**CE 18.02 TO CONSIDER AND APPROVE THE ADDITIONAL ELECTIVE COURSE SYLLABUS FOR UG DEGREE PROGRAMME TO BE OFFERED UNDER R-2019**



**RESOLVED TO APPROVE** the additional elective course syllabus for UG degree programme to be offered under **R-2019**

➤ **B.E. – CIVIL Elective courses**

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


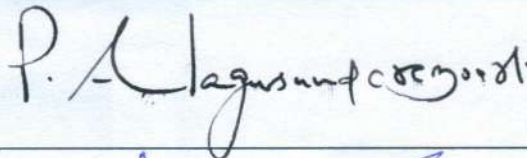

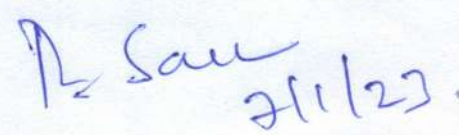






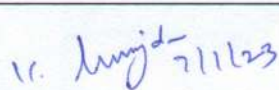
**Points suggested by the Academic Council members**

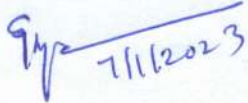

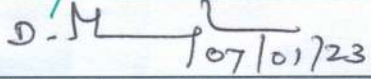


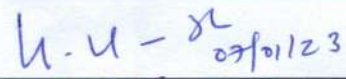

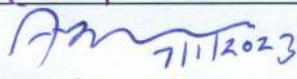

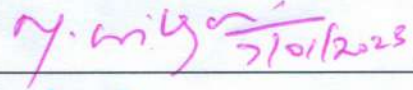


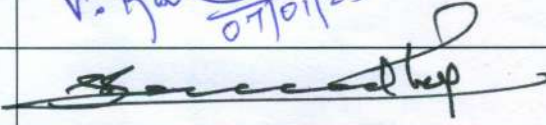

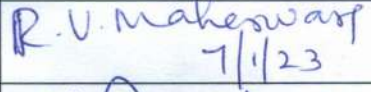
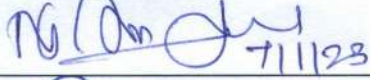


1. The committee members recommend that minimum eligibility to get Honours is 8.5 CGPA.
2. For Industry Practice, feedback / confidential report shall be received from industry mentor.
3. In ECE, Cyber Security verticals, various tools may be used to detect threats.
4. In CSE, name of Computational Programming verticals may be renamed as Industry 4.0.
5. In EEE, Electric Vehicle Technology verticals, two more electives may be added.
6. In IT, Data Science verticals, R-Programming Courses shall be included.
7. In PG, Project work / Industry Practice shall be adopted.
8. Change the CO5 of all courses to recent developments. Faculties can share the recent developments in industries among the students.



**CHAIRMAN / ACADEMIC COUNCIL**

**Members Present**

<b>Dr.K.Kalidasa Murugavel</b> Academic Council Chairman National Engineering College	
<b>Academic Experts</b>	
<b>Dr. P.Alagu Sundaramoorthy</b> Professor Department of Civil Engineering, IITM, Chennai	
<b>Dr.V.Sankaranarayanan</b> Professor & Head Department of EEE, National Institute of Technology, Trichy	
<b>Dr.R.Saravanan</b> Professor Department of Mechanical Engineering Anna University, Chennai	
<b>Dr. S.Swamynathan</b> Professor, Dept. of Information Science and Technology, Anna University, Chennai	
<b>Industrial Experts</b>	
<b>Dr.V.Veerappan</b> Cofounder & President, Tessolve Semiconductor Limited, Bangalore	
<b>Mr. Gurusamy S V</b> Chairman cum Managing Director, Elite Engineering & Construction (Hyd) Pvt. Ltd., Hyderabad, Telangana	
<b>Mr.Ramanathan Arunachalam</b> Director – Products with Magellan X Feather lite work space, 200 Ft. Radial Road, Pallavaram, Chennai	
<b>Mr.Srikanth S Valuthur</b> CXO Level Professional / Top Management Executive, Hybrid Cloud Services, IBM Consulting, APAC, Chennai	
<b>University Nominees</b>	
<b>Dr. M.Vijayaraj</b> Professor & Head, Department of ECE, Government College of Engineering, Tirunelveli	
<b>Dr. K.Linga Durai</b> Professor & Dean, Anna University Regional Campus, Madurai NH-7, Kanyakumari National Highway, Madurai	

<b>Dr.G.Kumaraguruparan</b> Professor, Department of Mechatronics, Thiagarajar College of Engineering, Madurai	 7/1/2023
<b>Special Invitees</b>	
<b>Dr.S.Shanmugavel</b> Director	
<b>Dr. D.Manimegalai</b> Controller of Examinations	 107/01/23
<b>Internal Members</b>	
<b>Dr.S.Tamil Selvi</b> Prof. & Dean (Academic)	 7/1/23
<b>Dr.M.A.Neelakantan</b> Sr. Dean (IFA) & Head / S & H	
<b>Dr.K.Manisekar</b> Dean (I&E) & Head / Mechanical Engg.	 07/01/23
<b>Dr.K.G.Srinivasagan</b> Dean (TCP) & Head / IT	
<b>Dr.A.Shenbagavalli</b> Prof. & Head / ECE	 7/1/2023
<b>Dr.V.Gomathi</b> Prof. & Head / CSE	 7/1/23
<b>Dr.M.Willjuice Iruthayarajan</b> Prof. & Head / EEE	 7/01/2023
<b>Dr.C.Puthiyasekar</b> Prof. & Head / Civil	
<b>Dr.V.Kalaivani</b> Prof. & Head / AI & DS	 07/01/23
<b>Dr.S.Rammurthy</b> Prof. / Mathematics	
<b>Dr.K.Mohaideen Pitchai</b> Prof. / CSE	
<b>Dr.R.V.Maheswari</b> Prof. / EEE	 7/1/23
<b>Dr.T.S.Arun Samuel</b> Prof. / ECE	 7/1/23
<b>Dr.V.Kannan</b> Asso. Prof. / Civil	 7/1/23
<b>Dr.D.Vignesh Kumar</b> Asst. Prof. (SG) / Mechanical	
<b>Student Members</b>	
<b>Mr.T.Anandhavel</b> Final year Mechanical	T. Anandhavel

Mr.M.S.Bala Ayyappan Third year ECE	<i>Bela Ayyappan MS</i>
Ms.S.Suji Final year CSE	<i>Suji</i>
Ms. P. Apsara Vahini Third year EEE	<i>P. Apsara Vahini</i>
Mr.A.Anandh Final year IT	<i>A. Anandh</i>
Mr. M.Sriram Final year Civil	<i>M. Sriram</i>

*[Signature]*  
CHAIRMAN  
ACADEMIC COUNCIL

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

**Actions Taken Report on Minutes of 17<sup>th</sup> Academic Council Meeting**

S. No.	Action Initiated	Action Taken
1.	The amendments in Clause 14.1.1 and 11.2 of Regulations 2019 For UG degree programmes	Implemented
2.	The amendments in Clause 5.6 and 12.4 of Regulations 2019 For PG degree programmes	Implemented
3.	List of Examiners for End Semester Project Viva-voce Examinations - UG & PG degree Programme to be offered under R-2019 Three industry experts may be included in the list of examiners for the End Semester Project Viva-voce Examinations	Implemented
4.	For ECE, CSE and IT, <ul style="list-style-type: none"> <li>Anna University mandatory Elective Course – (Professional Readiness for Innovation, Employability and Entrepreneurship) for UG Degree Programmes under R- 2019</li> </ul>	Implemented
5.	For Science and Humanities, <ul style="list-style-type: none"> <li>The curriculum structure and first year syllabus of B.Tech. Artificial intelligence and Data Science Programme under R-2019</li> </ul>	Incorporated in the curriculum
6.	For Mechanical Engineering, <ul style="list-style-type: none"> <li>The Syllabus of open elective courses in B.E.Mechanical Engineering Programme under R-2019</li> </ul>	Incorporated in the curriculum
7.	For ECE, <ul style="list-style-type: none"> <li>The syllabus of new elective courses and One Credit Courses for UG degree programme under R-2019</li> </ul>	Incorporated in the curriculum
8.	For CSE, <ul style="list-style-type: none"> <li>The syllabus of new Elective Courses and One credit course for UG degree programme under R-2019</li> </ul>	Incorporated in the curriculum

	<ul style="list-style-type: none"> <li>• The refinement of existing courses for UG &amp; PG degree programme to be offered under R-2019</li> <li>• One credit course - Kali Linux, practical component for UG degree programme under R-2019</li> </ul>	
9.	<p>For EEE,</p> <ul style="list-style-type: none"> <li>• The syllabus of programme elective courses, one credit Courses for UG degree programme under R-2019</li> </ul>	Incorporated in the curriculum
10.	<p>For Civil,</p> <ul style="list-style-type: none"> <li>• The syllabus of new elective courses, one credit Courses for UG degree programme under R-2019</li> </ul>	Incorporated in the curriculum
11.	<p>For IT,</p> <ul style="list-style-type: none"> <li>• The curriculum structure of B.Tech. Artificial Intelligence and Data Science Programme under R- 2019</li> <li>• The syllabus of new elective courses, one credit Courses for UG degree programme under R-2019</li> </ul>	Incorporated in the curriculum
12.	NPTEL grading for UG degree programme may be adopted for PG degree programme	Implemented

**CHAIRMAN /ACADEMIC COUNCIL**

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

AMENDMENTS TO CLAUSE 4.5, 4.8, 4.11, 6.10.2, 11.2, 12.5.5, 15.0, 15.3, 18.1 and 18.2 OF R-2019 UG DEGREE PROGRAMMES OF NATIONAL ENGINEERING COLLEGE

Existing UG Regulations - 2019	Amended UG Regulations - 2019										
<p><b>4.5 Inplant Training / Internship</b></p> <p><b>4.5.1</b> The students may undergo Inplant Training / Internship at industry or research organization or university or Live-in-Lab for the period prescribed in the curriculum during summer and winter vacation. The number of credits shall be assigned as detailed in <b>Table-5</b>. In such cases, Industrial Training / Internship need to be undergone continuously from one organization only.</p> <p style="text-align: center;"><b>TABLE - 5 CREDIT FOR INPLANT TRAINING / INTERNSHIP</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Duration of Training / Internship</th> <th style="text-align: center;">Credits</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2 Weeks</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">4 Weeks</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">6 Weeks</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">8 or more Weeks</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Duration of Training / Internship	Credits	2 Weeks	1	4 Weeks	2	6 Weeks	3	8 or more Weeks	4	<p><b>4.5 Internship / Inplant Training</b></p> <p><b>4.5.1</b> All the students should undergo Internship / Inplant Training at industry or research organization or university or Live-in-Lab for the period of one month and its equivalent credit is 2. The Heads of the Departments shall ensure that the necessary arrangements are made in this regard.</p>
Duration of Training / Internship	Credits										
2 Weeks	1										
4 Weeks	2										
6 Weeks	3										
8 or more Weeks	4										
<p><b>4.0 STRUCTURE OF THE PROGRAMMES</b></p> <p><b>4.8 Industrial Visit</b></p> <p>Every student is required to go for one Industrial visit every year starting from the second year of the programme. The Heads of the Departments shall ensure that the necessary arrangements are made in this regard.</p> <p><b>4.9 Medium of Instruction</b></p> <p>The medium of instruction shall be English for all the courses, examinations,</p>	<p><b>4.0 STRUCTURE OF THE PROGRAMMES</b></p> <p><b>4.8 Project work / Industry Practice</b></p> <p>4.8.1 Project work</p> <p>Project work is one of the skill development courses in the curriculum. Under the supervision of a faculty member, final year student is required to do some innovative work for a societal problem with the knowledge gained after undergoing various theory and laboratory courses during their study. A single student or group of students (not exceeding 4 per group) shall exhibit both analytical and practical skills through their project work.</p>										

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations – 2019	Amended UG Regulations - 2019
<p>seminar, presentations and project/thesis/dissertations reports.</p>	<p>Project work-I carries 3 credits, shall be registered in the 7<sup>th</sup> semester. Project work-II carries 6 credits shall be registered in 8<sup>th</sup> semester and it need not be a continuation of project work –I.</p> <p><b>4.8.2 Industry Practice</b></p> <p>Industry practice is a skill development course in the curriculum, wherein the student has to undergo industrial training under the industry mentor in a specific domain for one semester continuously. The students may register for industry practice during 8<sup>th</sup> semester.</p> <p><b>4.8.3</b> The students who have got internship offer in a company for duration of 10 to 15 weeks, shall register for Industry practice instead of Project work-II with the proper approval from Industry, Placement cell and concerned Head of the Department. They have to register the course within one week after the commencement of 8<sup>th</sup> semester.</p> <p><b>4.8.4</b> Those students who have undertaken industrial projects during the eighth semester should have completed their courses prescribed in the curriculum well in advance otherwise they can do such a course through online mode subject to a maximum of one course.</p> <p><b>4.9 Industrial Visit</b></p> <p>Every student is required to go for one Industrial visit every year starting from the second year of the programme. The Heads of the Departments shall ensure that the necessary arrangements are made in this regard.</p> <p><b>4.10 Medium of Instruction</b></p> <p>The medium of instruction shall be English for all the courses, examinations, seminar, presentations and project/thesis/dissertations reports.</p>



## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations – 2019	Amended UG Regulations - 2019
<p><b>4.11</b>      <b>NIL</b></p>	<p><b>4.11 Verticals (For the batches admitted from 2021 – 2022 onwards)</b></p> <p>Elective courses are listed in groups called verticals that represent a particular area of specialisation / domain. Students are permitted to choose all the Electives from a particular vertical or from different verticals.</p> <p><b>ELIGIBILITY CRITERIA</b></p> <ul style="list-style-type: none"> <li>▪ For the categories B.E / B.Tech. (<b>Honors with Specialization</b>) and B.E / B.Tech. (<b>Honors</b>), the students will be permitted to register the courses from V Semester onwards provided the marks earned by the students until III semester should be of CGPA 7.50 and above and cleared all the courses in the first attempt.</li> <li>▪ For the category B.E / B.Tech. (<b>minor degree</b>), the students will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50 and above.</li> </ul> <p>However, B.E. / B. Tech. (Hons) Specialisation in the same discipline, B.E / B.Tech. Honors and B.E. / B.Tech. minor in other specialisation degree will be optional for students.</p>
<p><b>6.10 Flexibility to Add or Drop Courses</b></p> <p><b>6.10.2</b> From the third to eighth semester, the student has the option of registering for additional courses or dropping existing courses. However, the student shall register for a minimum of 12 credits and a maximum of 30 credits in a semester.</p>	<p><b>6.10 Flexibility to Add or Drop Courses</b></p> <p><b>6.10.2</b> From the third to eighth semester, the student has the option of registering for additional courses or dropping existing courses. However, the student shall register for a <b>maximum of 32 credits</b> and a minimum of 12 credits (except in seventh and eighth semesters).</p>

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations - 2019	Amended UG Regulations - 2019																																												
<p><b>11.0 SYSTEM OF EXAMINATION AND ASSESSMENT PROCEDURE</b></p> <p><b>11.2 EVALUATION OF THE COURSES (For the batches admitted during 2019 - 2020 and 2020 - 2021 only)</b></p> <p>Each course, both theory/integrated and practical including project work shall be evaluated for a maximum of 100 marks. For all theory/integrated and practical courses including the project work, the continuous internal assessment shall carry 50% marks while the End Semester Examinations shall carry 50% marks. i.e., Each course shall be evaluated for a maximum of 100 marks as detailed in <b>Table-8 (a)</b>.</p> <p style="text-align: center;"><b>TABLE - 8 (a) EVALUATION OF THE COURSES</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">S. No.</th> <th style="width: 30%;">Category of Course</th> <th style="width: 20%;">Continuous Assessment</th> <th style="width: 25%;">End Semester Examinations</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Theory / Integrated Courses</td> <td>50 marks</td> <td>50 Marks</td> </tr> <tr> <td>2.</td> <td>Laboratory Courses</td> <td>50 Marks</td> <td>50 Marks</td> </tr> <tr> <td>3.</td> <td>Product Development Laboratory</td> <td>50 Marks</td> <td>50 Marks</td> </tr> <tr> <td>4.</td> <td>Project Work - I &amp; II</td> <td>50 Marks</td> <td>50 Marks</td> </tr> </tbody> </table>	S. No.	Category of Course	Continuous Assessment	End Semester Examinations	1.	Theory / Integrated Courses	50 marks	50 Marks	2.	Laboratory Courses	50 Marks	50 Marks	3.	Product Development Laboratory	50 Marks	50 Marks	4.	Project Work - I & II	50 Marks	50 Marks	<p><b>11.0 SYSTEM OF EXAMINATION AND ASSESSMENT PROCEDURE</b></p> <p><b>11.2 EVALUATION OF THE COURSES (For the batches admitted during 2019 - 2020 and 2020 - 2021 only)</b></p> <p>Each course, both theory / integrated and practical including project work and Industry Practice shall be evaluated for a maximum of 100 marks as detailed in <b>Table - 8 (a)</b>.</p> <p style="text-align: center;"><b>TABLE - 8 (a) EVALUATION OF THE COURSES</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">S. No.</th> <th style="width: 30%;">Category of Course</th> <th style="width: 20%;">Continuous Assessment</th> <th style="width: 25%;">End Semester Examinations</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Theory / Integrated Courses</td> <td>50 marks</td> <td>50 Marks</td> </tr> <tr> <td>2.</td> <td>Laboratory Courses</td> <td>50 Marks</td> <td>50 Marks</td> </tr> <tr> <td>3.</td> <td>Product Development Laboratory</td> <td>50 Marks</td> <td>50 Marks</td> </tr> <tr> <td>4.</td> <td>Project Work - I &amp; II</td> <td>50 Marks</td> <td>50 Marks</td> </tr> <tr> <td>5.</td> <td>Industry Practice</td> <td>--</td> <td>100 Marks</td> </tr> </tbody> </table>	S. No.	Category of Course	Continuous Assessment	End Semester Examinations	1.	Theory / Integrated Courses	50 marks	50 Marks	2.	Laboratory Courses	50 Marks	50 Marks	3.	Product Development Laboratory	50 Marks	50 Marks	4.	Project Work - I & II	50 Marks	50 Marks	5.	Industry Practice	--	100 Marks
S. No.	Category of Course	Continuous Assessment	End Semester Examinations																																										
1.	Theory / Integrated Courses	50 marks	50 Marks																																										
2.	Laboratory Courses	50 Marks	50 Marks																																										
3.	Product Development Laboratory	50 Marks	50 Marks																																										
4.	Project Work - I & II	50 Marks	50 Marks																																										
S. No.	Category of Course	Continuous Assessment	End Semester Examinations																																										
1.	Theory / Integrated Courses	50 marks	50 Marks																																										
2.	Laboratory Courses	50 Marks	50 Marks																																										
3.	Product Development Laboratory	50 Marks	50 Marks																																										
4.	Project Work - I & II	50 Marks	50 Marks																																										
5.	Industry Practice	--	100 Marks																																										
<p><b>11.2 (a) EVALUATION OF THE COURSES (For the batch admitted from 2021 - 2022 onwards)</b></p> <p>Each course, both theory / integrated and practical including project work shall be evaluated for a maximum of 100 marks as detailed in <b>Table - 8 (b)</b>.</p> <p style="text-align: center;"><b>TABLE - 8 (b) EVALUATION OF THE COURSES</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">S. No.</th> <th style="width: 30%;">Category of Course</th> <th style="width: 20%;">Continuous Assessment</th> <th style="width: 25%;">End Semester Examinations</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Theory Courses</td> <td>40 marks</td> <td>60 Marks</td> </tr> </tbody> </table>	S. No.	Category of Course	Continuous Assessment	End Semester Examinations	1.	Theory Courses	40 marks	60 Marks	<p><b>11.2 (a) EVALUATION OF THE COURSES (For the batch admitted from 2021 - 2022 onwards)</b></p> <p>Each course, both theory / integrated and practical including project work and Industry Practice shall be evaluated for a maximum of 100 marks as detailed in <b>Table - 8 (b)</b>.</p> <p style="text-align: center;"><b>TABLE - 8 (b) EVALUATION OF THE COURSES</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">S. No.</th> <th style="width: 30%;">Category of Course</th> <th style="width: 20%;">Continuous Assessment</th> <th style="width: 25%;">End Semester Examinations</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Theory Courses</td> <td>40 marks</td> <td>60 Marks</td> </tr> </tbody> </table>	S. No.	Category of Course	Continuous Assessment	End Semester Examinations	1.	Theory Courses	40 marks	60 Marks																												
S. No.	Category of Course	Continuous Assessment	End Semester Examinations																																										
1.	Theory Courses	40 marks	60 Marks																																										
S. No.	Category of Course	Continuous Assessment	End Semester Examinations																																										
1.	Theory Courses	40 marks	60 Marks																																										

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations – 2019				Amended UG Regulations - 2019			
2.	Laboratory Courses	60 Marks	40 Marks	2.	Laboratory Courses	60 Marks	40 Marks
3.	Theory Courses with Laboratory Component	50 Marks	50 Marks	3.	Theory Courses with Laboratory Component	50 Marks	50 Marks
4.	Product Development Laboratory	50 Marks	50 Marks	4.	Product Development Laboratory	60 Marks	40 Marks
5.	Project Work - I & II	50 Marks	50 Marks	5.	Project Work - I	40 Marks	60 Marks
				6.	Project Work - II	40 Marks	60 Marks
				7.	Industry Practice	--	100 Marks
<b>12.5.5</b>				<b>12.5.5 INDUSTRY PRACTICE</b>			
NIL				<p>After the completion of the industry practice as per <b>clause 4.8.2</b>, the student shall submit a completion certificate endorsed by the industry mentor. The industry mentor shall submit a feedback / confidential report to the concerned HODs. The course shall carry 100 marks and shall be evaluated through End Semester Examination (ESE) only. The ESE shall be conducted by the two member committee consisting of internal faculty member and external expert (preferably from industry) nominated by the COE in consultation with HOD.</p>			
<b>15.0 AWARD OF LETTER GRADES</b>				<b>15.0 AWARD OF LETTER GRADES</b>			
For the students who have not passed the examination, Reappearance (RA) shall be awarded				For the students who have not passed the examination, Reappearance (U) shall be awarded			
<b>15.3</b>				<b>15.3</b>			
NIL				<p><b>15.3.1 If a student decides not to opt for Honours</b>, after completing certain number of additional courses, the additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Professional Elective courses required as per the</p>			

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations – 2019	Amended UG Regulations - 2019
	<p>curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA.</p> <p><b>15.3.2 If a student decides not to opt for Minor</b>, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA.</p>
<p><b>18.0 CLASSIFICATION OF THE DEGREE AWARDED</b></p> <p><b>18.1 First Class with Distinction</b></p> <p>A candidate who satisfies the following conditions shall be declared to have passed the examination in First Class with Distinction.</p> <ul style="list-style-type: none"> <li>▪ Should have passed the End Semester Examination in all the courses of all the eight semesters (six semesters in the case of lateral entry) in his/her First Appearance within five years (four years in the case of lateral entry) which includes authorized break of the study of one year. Withdrawal from examination (vide <i>clause 19.0</i>) will not be considered as an appearance.</li> <li>▪ Should have secured a CGPA of not less than 8.50</li> <li>▪ Should not have been prevented from writing end semester examination due to lack of attendance in any of the courses.</li> </ul>	<p><b>18.0 CLASSIFICATION OF THE DEGREE AWARDED</b></p> <p><b>18.1 First Class with Distinction</b></p> <p>A candidate who satisfies the following conditions shall be declared to have passed the examination in First Class with Distinction.</p> <ul style="list-style-type: none"> <li>▪ Should have passed the End Semester Examination in all the courses of all the eight semesters (six semesters in the case of lateral entry) in his/her First attempt within five years (four years in the case of lateral entry) which includes authorized break of the study of one year. Withdrawal from examination (vide <i>clause 19.0</i>) will not be considered as an attempt.</li> <li>▪ Should have secured a CGPA of not less than 8.50</li> <li>▪ Should not have been prevented from writing end semester examination due to lack of attendance in any of the courses.</li> </ul>

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations – 2019	Amended UG Regulations - 2019
	<p><b>B.E. / B.Tech. (Honours) specialization in the same discipline</b></p> <ul style="list-style-type: none"> <li>▪ The student should have earned additionally a minimum of 18 credits from a vertical of the same discipline.</li> <li>▪ Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.</li> <li>▪ Should have passed all the courses in the first attempt.</li> <li>▪ Should have earned a minimum CGPA of 8.50.</li> </ul> <p><b>B.E. / B.Tech. (Honours)</b></p> <ul style="list-style-type: none"> <li>▪ The students should have earned additional courses (minimum of 18 credits) from more than one vertical of the same discipline.</li> <li>▪ Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.</li> <li>▪ Should have passed all the courses in the first attempt.</li> <li>▪ Should have earned a minimum CGPA of 8.50.</li> </ul> <p><b>B.E. / B.Tech. (Minor in other Specialization)</b></p> <ul style="list-style-type: none"> <li>▪ The student should have earned additionally a minimum of 18 credits in any one of the verticals of other discipline.</li> <li>▪ Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.</li> <li>▪ Should have passed all the courses in the first attempt.</li> <li>▪ Should have earned a minimum CGPA of 8.50.</li> </ul>
<p><b>18.2 First Class</b></p> <p>A candidate who satisfies the following conditions shall be declared to have passed the examination in First Class.</p>	<p><b>18.2 First Class</b></p> <p>A candidate who satisfies the following conditions shall be declared to have passed the examination in First Class.</p>

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations – 2019	Amended UG Regulations - 2019
<ul style="list-style-type: none"> <li>▪ Should have passed the End Semester Examination in all the courses of all the eight semesters (six semesters in the case of lateral entry) within five years (four years in the case of lateral entry). One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years (four years in the case of lateral entry) for the award of First Class.</li> <li>▪ Should have secured a CGPA of not less than 7.00 (<i>Applicable for the students admitted in 2019 – 2020, 2020 - 2021 batches only</i>) / 6.50 (<i>Applicable for the students admitted from 2021 – 2022 onwards</i>)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Should have passed the End Semester Examination in all the courses of all the eight semesters (six semesters in the case of lateral entry) within five years (four years in the case of lateral entry). One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years (four years in the case of lateral entry) for the award of First Class.</li> <li>▪ Should have secured a CGPA of not less than 7.00 (<i>Applicable for the students admitted in 2019 – 2020, 2020 - 2021 batches only</i>) / 6.50 (<i>Applicable for the students admitted from 2021 – 2022 onwards</i>)</li> </ul> <p><b>B.E. / B.Tech. (Honours) specialization in the same discipline</b></p> <ul style="list-style-type: none"> <li>▪ The student should have earned additionally a minimum of 18 credits from a vertical of the same discipline.</li> <li>▪ Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.</li> <li>▪ Should have passed all the courses in the first attempt.</li> <li>▪ Should have earned a minimum CGPA of 7.50.</li> <li>▪ Withdrawal from writing end semester examination will not be considered as an attempt.</li> </ul> <p><b>B.E. / B.Tech. (Honours)</b></p> <ul style="list-style-type: none"> <li>▪ The students should have earned additional courses (minimum of 18 credits) from more than one vertical of the same discipline.</li> <li>▪ Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.</li> </ul>

## AMENDMENTS IN UG / PG REGULATION 2019 (18th Academic Council Meeting on 07.01.2023)

Existing UG Regulations - 2019	Amended UG Regulations - 2019
	<ul style="list-style-type: none"> <li>▪ Should have passed all the courses in the first attempt.</li> <li>▪ Should have earned a minimum CGPA of 7.50.</li> <li>▪ Withdrawal from writing end semester examination will not be considered as an attempt.</li> </ul> <p><b>B.E. / B.Tech. (Minor in other Specialization)</b></p> <ul style="list-style-type: none"> <li>▪ The student should have earned additionally a minimum of 18 credits in any one of the verticals of other discipline.</li> <li>▪ Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.</li> <li>▪ Should have earned a minimum CGPA of 6.50.</li> </ul>

### AMENDMENTS IN PG REGULATION 2019 CLAUSE 12.4.1 - (18<sup>th</sup> Academic Council Meeting on 07.01.2023)

Existing PG Regulations - 2019	Amended PG Regulations - 2019
<p><b>12.4.1 NPTEL Online courses</b></p> <p>Students may study online courses (which are provided with Certificate) with the approval of respective Head of the Department &amp; Dean (Academic) subject to a maximum of 3 credits. The approved list of online courses will be provided by the office of Dean Academic from time to time. The Credit Equivalence shall be as follows:</p> <p>The NPTEL online course with minimum of 15 contact hours or 4 weeks duration may be considered as equivalent to one credit. Online courses with one, two, three, and four credit may be considered for credit transfer.</p>	<p><b>12.4.1 NPTEL Online courses</b></p> <p>Students may study online courses (which are provided with Certificate) with the approval of respective Head of the Department &amp; Dean (Academic) subject to a <b>maximum of 6 credits</b>. The approved list of online courses will be provided by the office of Dean Academic from time to time. The Credit Equivalence shall be as follows:</p> <p>The NPTEL online course with minimum of 15 contact hours or 4 weeks duration may be considered as equivalent to one credit. Online courses with one, two, three, and four credit may be considered for credit transfer.</p>

