

Near National Highway No. 16, Kadakatla, Tadepalligudem – 534101

West Godavari District, Andhra Pradesh, India

No. NITANP/SEMA/2023-24/1278

Date: 22/12/2023

NOTICE

Sub: Minor Degree Programme for the AY 2023-24 (applicable for 2022 admitted B.Tech. Students).

Ref: NIT Andhra/AA/2021-22/16, dated: 07/12/2022

All the II B.Tech. students of AY 2023-24 are hereby informed that the students are given the option of selecting a minor programme as per the modalities below.

Modalities for the Minor Programme (B.Tech.)

- 1. Students with a minimum CGPA of 7.5 at the end of I B.Tech. II Semester (with no backlog courses) are eligible for minor degree program selection process.
- 2. Eligible students have to register their options for the minor programme, indicating the priority for each option in the order starting from 1(highest priority) up to 4/5(lowest priority). You will receive a google form link for each department to register your options by email.
- 3. The deadline for filling the google form is 29th December 2023, 5 PM.
- 4. A student can edit the google form submission any number of times, but the latest submission at the time of deadline is considered for scrutiny.
- 5. The selection process for minor programme is based on CGPA (upto I B. Tech II Semester) subjected to the constraints of minimum of 5 students to a maximum of 60 students for each minor specialization.
- 6. The courses listed in each Minor Programme course structure (additional 16 credits) are over and above the regular B.Tech. programme credit requirements (162 credits).
- 7. The grades/GPA for minor programmes shall be mentioned separately in the marks list.
- 8. Any grievances in the allotment of the minor degree programme should be brought to the notice of Dean (Academic Affairs) within 1 week of the notification of allotment (forwarded through respective HoD).



राष्ट्रीय प्रौद्योगिकी संस्थान आंध्रप्रदेश NATIONAL INSTITUTE OF TECHNOLOGY ANDHRA PRADESH

Near National Highway No. 16, Kadakatla, Tadepalligudem – 534101 West Godavari District, Andhra Pradesh, India

MINOR DEGREE SPECIALIZATIONS

Minor Specialization: Environmental Sustainability (Department of Civil Engineering)

| Courses for Minor in Environmental Sustainability | | | | | | | | | |
|---|----------------|-----------------------------------|---|---|-------|----|----------------|--|--|
| S. No. | Course Code | Course Name | L | Т | T P C | | Offered SEM | | |
| 01 | CEM261 | Sustainability for Engineers | 4 | 0 | 0 | 4 | 4th | | |
| 02 | CEM311 | Basics of Life Cycle Analysis | 4 | 0 | 0 | 4 | 5th | | |
| 03 | CEM361 | Environmental Impact Assessment | 4 | 0 | 0 | 4 | 6th | | |
| 04 | CEM411 | Basics of Climate Change | 4 | 0 | 0 | 4 | 7th | | |
| 05 | CEM412 | Integrated Solid Waste Management | 4 | 0 | 0 | 4 | 7th | | |
| | | Total | | | | 20 | | | |

Minor Specialization: Software Engineering (Department of Computer Science and Engineering)

| Courses for Minor in Software Engineering | | | | | | | | | | |
|---|----------------|---------------------------------|---|---|---|---------|----------------|--|--|--|
| S. No. | Course Code | Course Title | L | Т | Р | Credits | Offered Sem | | | |
| 1 | CSM251 | Algorithmics and Programming | 2 | 0 | 2 | 03 | 4th | | | |
| 2 | CSM301 | Object Oriented Programming | 3 | 0 | 0 | 03 | 5th | | | |
| 3 | CSM302 | Object Oriented Programming Lab | 0 | 1 | 2 | 02 | 5th | | | |
| 4 | CSM351 | Database Management Systems | 2 | 0 | 2 | 03 | 6th | | | |
| 5 | CSM401 | Web Programming | 2 | 0 | 2 | 03 | 7th | | | |
| 6 | CSM402 | Software Engineering | 1 | 0 | 2 | 02 | 7th | | | |

Minor Specialization: <u>Artificial Intelligence for Signal Processing Applications</u> (Department of Electronics & Communication Engineering)

| | Courses for Minor in Artificial Intelligence for Signal Processing Applications | | | | | | | | |
|-------|---|--|----|---|---|---------|----------------|--|--|
| S. No | Course Code | Course Title | L | Т | Р | Credits | Offered Sem | | |
| 1 | ECM251 | Statistical Foundations for Signal Processing and Machine Learning | 4 | 0 | 0 | 4 | 4th | | |
| 2 | ECM301 | Non-Linear Programming | 3 | 0 | 3 | 3 | 5th | | |
| 3 | ECM351 | Machine Learning for Signal Processing applications | 4 | 0 | 0 | 4 | 6th | | |
| 4 | ECM401 | Digital Modulation and Coding | 3 | 0 | 0 | 3 | 7th | | |
| 5 | ECM402 | AI for Signal Processing applications Lab | 0 | 0 | 2 | 2 | 7th | | |
| | | Total | 14 | 0 | 5 | 16 | | | |



Near National Highway No. 16, Kadakatla, Tadepalligudem – 534101

West Godavari District, Andhra Pradesh, India

Minor Specialization: <u>Electric Vehicles</u> (Department of Electrical Engineering Department)

| | Courses for Minor in Electric Vehicles | | | | | | | | |
|------|--|--|---|---|---|---------|----------------|--|--|
| S.No | Course Code | Course Title | L | Т | Р | Credits | Offered Sem | | |
| 1 | EEM251 | Principles of Energy Conversion and Transmission in Vehicles | 3 | 0 | 0 | 03 | 4th | | |
| 2 | EEM301 | E-Mobility Developments and Standards | 3 | 0 | 0 | 03 | 5th | | |
| 3 | EEM302 | Battery Energy Storage and EV Charging Systems | 3 | 0 | 0 | 03 | 5th | | |
| 4 | EEM351 | Electric Drives for EVs | 3 | 0 | 0 | 03 | 6th | | |
| 5 | EEM352 | EV Battery Charging Systems Lab | 0 | 1 | 2 | 02 | 6th | | |
| 6 | EEM401 | EV Propulsion Systems Lab | 0 | 1 | 2 | 02 | 7th | | |
| | | TOTAL | | | | 16 | | | |

Minor Specialization: <u>Automation and Robotics</u> (Department of Mechanical Engineering)

| | Courses for Minor in Automation and Robotics | | | | | | | | | |
|--------|--|---------------------------------------|----|---|----|---------|----------------|--|--|--|
| S. No. | Course Code | Course Title | L | Т | Р | Credits | Offered Sem | | | |
| 1 | MEM251 | Mechanisms and Machines | 3 | 0 | 0 | 03 | 4th | | | |
| 2 | MEM301 | Automation Technologies in Industries | 3 | 0 | 0 | 03 | 5th | | | |
| 3 | MEM351 | Mechatronic Systems | 3 | 0 | 0 | 03 | 6th | | | |
| 4 | MEM352 | Mechatronics Lab | 0 | 0 | 3 | 02 | 6th | | | |
| 5 | MEM401 | CNC and Robotics | 3 | 0 | 0 | 03 | 7th | | | |
| 6 | MEM402 | CNC and Robotics Lab | 0 | 0 | 3 | 02 | 7th | | | |
| | | TOTAL | 12 | 0 | 06 | 16 | | | | |

This notice is issued with the approval of competent authority.

Sd/-Dean (Academic Affairs)

Сору То

- 1. All Heads of the Departments
- 2. Associate Dean (AA) for circulation and necessary actions.
- 3. Associate Dean (WNT) for uploading on the Institute website.
- 4. Office file.