

No. NIT Andhra/AA/2021-22/ 17

## Date: 11-01-2022

## <u>NOTICE</u>

**Sub:** Minor Degree Programme for II B.Tech. students of the AY 2021-2022

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

All the II B.Tech. students of AY 2021-2022 are hereby informed that the students are given the option of selecting a minor programme as per the modalities below. Students are further informed to attend an **online meeting (via the zoom link sent to Institute email) in this regard on 12/01/2022 (Monday) at 4 PM.** 

# Modalities for the Minor Degree 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.
- 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) upto 5(lowest priority). Use the link (<u>https://forms.gle/7w45YEUAZe7xpPtv5</u>) to register your options.
- 3. The deadline for filling the google form is 16<sup>th</sup> January 2022 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. A student can opt for any of the minor programmes irrespective of the parent department of the student.
- 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.
- 7. The classes for minor degree programme shall commence from 20/01/2022.
- 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).



- 9. The grades/GPA for minor programmes shall be mentioned separately in the marks list.
- 10. Any grievances in the allotment of the minor degree programme should be brought to the notice of Dean (Academic Affairs) with in 1 week of the notification of allotment (forwarded through respective HoD).

# MINOR DEGREE SPECIALIZATIONS

	Courses for Minor								
S. No	Course	Course Title	L	Т	Р	Credits	Offered		
	Code						Sem		
1	CEM251	Unmanned Aerial Systems (UAS)	4	0	0	4	4 <sup>th</sup>		
2	CEM301	Principles of Remote Sensing	4	0	0	4	5 <sup>th</sup>		
3	CEM351	Digital Image Processing	4	0	0	4	6 <sup>th</sup>		
4	CEM401	Fundamentals of GIS	4	0	0	4	7 <sup>th</sup>		
		Total	16	0	0				

# Minor in <u>Geoinformatics</u> (Civil Engineering)

#### Minor in <u>Software Engineering</u> (Computer Science and Engineering Department)

	Courses for Minor									
S. No	Course Code	Course Title	L	Т	Р	Credits	Offered			
1		Algorithmics and Programming	2	0	2	03	sem 3rd			
2		Object Oriented Programming	3	0	0	03	4th			
3	CSM301	Database Management Systems	2	0	2	03	5th			
4	CSM351	Web Programming	2	0	2	03	6th			
5	CSM252	Object Oriented Programming Lab	0	1	2	02	4th			
6	CSM352	Software Engineering	1	0	2	02	6th			
		Total	10	1	10	16				



## Minor in <u>Artificial Intelligence for Signal Processing Applications</u> (Electronics & Communication Engineering Department)

Courses								
S. No	Course	<b>Course Title</b>	L	Т	Р	Credits	Offered	
	Code						sem	
1	ECM201	Statistical Foundations for Signal	4	0	0	4	4th	
		Processing and Machine Learning						
2	ECM202	Non-Linear Programming	3	0	3	3	5th	
3	ECM301	Machine Learning for Signal	4	0	0	4	6th	
		Processing applications						
4	ECM302	Digital Modulation and Coding	3	0	0	3	7th	
5	ECM351	AI for Signal Processing applications	0	0	2	2	6 <sup>th</sup> /7 <sup>th</sup>	
		Lab						
		Total	14	0	5	16		

# Minor Specialization: Electric Vehicles (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	EEM351	Electric Drives for EVs	3	0	0	03	6th		
4	EEM401	Battery Energy Storage and EV Charging Systems	3	0	0	03	7th		
5	EEM302	EV Battery Charging Systems Lab	0	1	2	02	5th		
6	EEM402	EV Propulsion Systems Lab	0	1	2	02	7th		
		TOTAL	12	2	4	16			



### **<u>Minor in Automation and Robotics</u>** (Mechanical Engineering Department)

<b>Courses for Minor in Automation and Robotics</b>									
S.No	Course Code	Course Title	L	Т	Р	Credits	Offered Sem		
1	MEM201	Mechanisms and Machines	3	0	0	03	4 <sup>th</sup>		
2	MEM251	Automation Technologies in Industries	3	0	0	03	5 <sup>th</sup>		
3	MEM301	Mechatronic Systems	3	0	0	03	6 <sup>th</sup>		
4	MEM302	Mechatronics Lab	0	0	3	02	6 <sup>th</sup>		
5	MEM351	CNC and Robotics	3	0	0	03	$7^{\text{th}}$		
6	MEM352	CNC and Robotics Lab	0	0	3	02	7 <sup>th</sup>		
		TOTAL	12	0	06	16			

This notice is issued with the approval of competent authority.

Sd/-Dean (Academic Affairs) NIT Andhra Pradesh

Сору То

- 1. AD- UG (A&E) Kindly circulate the notice.
- 2. All Heads of the Departments
- 3. PS to Director for kind information to the Director
- 4. Registrar office for kind information