



## **HONORS AND DOUBLE MINORS:**

Students of a department / discipline are eligible to opt for the Honors Programme offered by the same department / discipline. Students can select the additional and advanced courses from their respective programme in which they are pursuing the degree and get an honors degree in the same. Students can also opt for Industry relevant tracks of respective programme to obtain the Honors degree.

Honors: If a Student of Mechanical Engineering selects Advance Thermal Engineering course of Mechanical Engineering department, he/she will get B. Tech. in Mechanical Engineering with (Honors) specialization in Advance Thermal Engineering.

Students who are desirous of pursuing their special interest areas other than the chosen discipline of engineering may opt for additional courses in minor specialization groups offered by a department other than their parent department. Students can also opt for Industry relevant tracks of any programme to obtain the Minor degree.

Minors: If a Student of Mechanical Engineering selects Data Science course of Computer Science and engineering department, he/she will get B. Tech in Mechanical Engineering with (Minors) specialization in Data Science.

The Honors and Minor program will commence in Semester 3<sup>rd</sup> and will be spread over 6 semesters (III-VIII). Eligible students can opt for anyone Honors or double Minors certification offered by the department. To avail Honors or Minors certification, students need to acquire an additional 18 credits. The choice rests with the learners to undertake the Honors /Minors, rendering the scheme totally voluntary.

## **The following are Honors and Double Minor programs offered by departments of:**

### **1. Computer Science & Engineering**

[Sem III & IV](#)

[Sem V & VI](#)

### **2. Electronics & Telecommunication Engineering**

[Sem III & IV](#)

[Sem V & VI](#)

### **3. Information Technology**

[Sem III & IV](#)

[Sem V & VI](#)

### **4. Civil Engineering**

[Sem III & IV](#)

[Sem V & VI](#)

### **5. Mechanical Engineering**

[Sem III & IV](#)

[Sem V & VI](#)

### **6. Artificial Intelligence (AI) and Data Science**

[Sem III & IV](#)

[Sem V & VI](#)



# Sipna College of Engineering and Technology, Amravati

(An Autonomous Institute Affiliated to Sant Gadge Baba Amravati University, Amravati)

(Accredited with 'A+' Grade by NAAC)

[www.sipnaengg.ac.in](http://www.sipnaengg.ac.in)



## Honors/ Double Minors Degree Programmes

Offering Department	Eligible Students	Honors & Double Minors Degree Programme	3 <sup>rd</sup> Semester	4 <sup>th</sup> Semester	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	7 <sup>th</sup> Semester
Computer Science and Engineering	Honors: AD/CS/IT /ET Minors: CE/ME	Artificial Intelligence and Machine Learning	Artificial Intelligence	Machine Learning	Deep Learning	Generative AI	Capstone Project
Information Technology	Honors: AD/CS/IT /ET Minors: CE/ME	Data Science	Foundations of Data Science	Statistics for Data Science	Data Science for Health and Social Care	AI for Data Analytics	Capstone Project
Civil Engineering	Honors: CE	Structural Engineering	Advanced Concrete Technology	Advanced Structural Analysis	Advanced Design of RCC Structures	Prestressed Concrete	Capstone Project
	Honors: CE	Water Resources Engineering	Hydrology	Irrigation Engineering	Flow Irrigation	Dam Engineering	Capstone Project
	Minors: CS/IT /ET/ME/AD	Building Construction	Building Materials	Interior Designing and Drafting	Estimating & Costing	Building Construction Management	Capstone Project
	Minors: CS/IT/ET/ME/AD	Environmental Management	Environmental Policies & Practices	Environmental Impact Assessment	Solid & Hazardous Waste Management	E-Waste & Plastic Waste Management	Capstone Project
Mechanical Engineering	Honors: ME Minors: AD/CE/CS/ET/IT	Advance Thermal Engineering	Applied Thermodynamics	Fluid Dynamics	Transfer & Heat Exchanger Design	Advance R&AC	Capstone Project
	Honors: ET/ME Minors: AD/CE/CS/IT	Robotics & Automation	Principles of Robotics	Robot Programming and Simulation	Industrial Automation	Artificial Intelligence in Robotics	Capstone Project
	Honors: ME Minors: AD/CE/CS/ET/IT	Additive Manufacturing	Fundamentals of Additive Manufacturing	Design for Additive Manufacturing	3D printing	Metal Additive Manufacturing	Capstone Project
	Honors: ET/ME Minors: AD/CE/CS/IT	Electric Vehicle	Basics of Automobile & EV	Battery Management & Fuel Cell Technologies	Hybrid & Autonomous Vehicle	Charging Infrastructure	Capstone Project
	Honors: ME Minors: AD, CE, CS, ET, IT	Business Development Marketing & Finance	Business Environment	Business Law & Ethics	Marketing Management & Analytics	Logistic Operations	Capstone Project
	Honors: ME Minors: AD/CE/CS/ET/IT	Logistic Management	Inventory Management	Demand Planning & Forecasting	Supply Chain Management	Industrial Costing & Finance	Capstone Project
Electronics and Telecommunication Engineering	Honors: ET Minors: AD/CE/CS/IT/ME	Semiconductor Technologies	Devices and CMOS Technology	Introduction to VLSI design	Logic Synthesis and Optimization	VLSI Chip Design	Capstone Project
	Honors: ET Minors: AD/CE/CS/IT/ME	Advance Communication Network	Communication Network	Advanced Communication Networks	Cloud Computing	Advance Network Security	Capstone Project
Artificial Intelligence (AI) and Data Science	Honours: AD/CS/IT/ET Minors: CE/ME	Deep Learning	Foundations of Deep Learning	Deep Learning Architecture	Advanced Deep Learning	AI Ethics and Fairness	Capstone Project



**Honors/Double Minor Degree Programmes applicable to students at Institute Level**

Offering Department	Honors/Double Minors degree Program	Computer Science and Engineering	Information Technology	Electronics and Telecommunication Engineering	Civil Engineering	Mechanical Engineering	Artificial Intelligence (AI) and Data Science
Computer Science and Engineering	Artificial Intelligence and Machine Learning	Honors	Honors	Honors	Minor	Minor	Honors
Information Technology	Data Science	Honors	Honors	Honors	Minor	Minor	Honors
Civil Engineering	Structural Engineering	-	-	-	Honors	-	-
	Water Resources Engineering	-	-	-	Honors	-	-
	Building Construction	Minor	Minor	Minor	-	Minor	Minor
	Environmental Management	Minor	Minor	Minor	-	Minor	Minor
Mechanical Engineering	Advance Thermal Engineering	Minor	Minor	Minor	Minor	Honors	Minor
	Robotics & Automation	Minor	Minor	Honors	Minor	Honors	Minor
	Additive Manufacturing	Minor	Minor	Minor	Minor	Honors	Minor
	Electric Vehicle	Minor	Minor	Honors	Minor	Honors	Minor
	Business Development Marketing & Finance	Minor	Minor	Minor	Minor	Honors	Minor
	Logistic Management	Minor	Minor	Minor	Minor	Honors	Minor
Electronics and Telecommunication Engineering	Semiconductor Technologies	Minor	Minor	Honors	Minor	Minor	Minor
	Advance Communication Network	Minor	Minor	Honors	Minor	Minor	Minor
Artificial Intelligence (AI) and Data Science	Deep Learning	Honors	Honors	Honors	Minor	Minor	Honors

**\* The guidelines related to the Honors/Minor degree Certification are provided as separate document: Rules and Regulations of Honors and Minors.**

**Dr. G.P. Dhok**  
**Dean Academics**