

Minor Specializations

| S. No. | Minor Specialization Offered by ECE dept. | Credits | |
|--------|---|---------|--|
| 1 | Embedded System | 20 | |
| 2 | Internet of Robotics Things | 20 | |

Minor Specialization-1: Embedded System

| S. No. | Course Code | Dept. | Title of Course | Contact Hours | | | | Credits | Sem. |
|--------|-------------|-------|---|---------------|---|---|-----------|-----------|--------------|
| | | | | L | T | P | Total | | |
| 1. | 18B11EC920 | ECE | Electronic Circuit Design | 3 | 0 | 0 | 3 | 3 | III |
| 2. | 18B11EC914 | ECE | Transducer Engineering | 3 | 0 | 0 | 3 | 3 | IV |
| 3. | 18B17EC974 | ECE | Transducer Engineering Lab | 0 | 0 | 2 | 2 | 1 | IV |
| 4. | 18B11EC919 | ECE | Digital Control System | 3 | 0 | 0 | 3 | 3 | V |
| 5. | 18B11EC915 | ECE | Microcontroller and Embedded System | 3 | 0 | 0 | 3 | 3 | VI |
| 6. | 18B17EC976 | ECE | Microcontroller and Embedded System lab | 0 | 0 | 2 | 2 | 1 | VI |
| 7. | 18B11EC916 | ECE | Embedded Control System | 3 | 0 | 0 | 3 | 3 | VII/V III |
| 8. | 18B11EC918 | ECE | Real Time Embedded System Design | 3 | 0 | 0 | 3 | 3 | VII/V III |
| | | | Total | | | | 22 | 20 | |

Minor Specialization-2 offered by ECE dept. with CSE dept. : Internet of Robotics Things for ECE and CSE students)

| S. No. | Course Code | Dept. | Title of Course | Contact Hours | | | | Credits | Sem. |
|--------|--------------------------|-------------|--|---------------|---|---|-----------|-----------|--------------|
| | | | | L | T | P | Total | | |
| 1. | 18B11EC314 18B11EC919 | ECE | Measurement & Instrumentation (for CSE)/ Digital Control System (for ECE) | 3 | 0 | 0 | 3 | 3 | V |
| 2. | 18B11EC911 | ECE | Sensors, Actuators & Signal Processing | 3 | 0 | 0 | 3 | 3 | IV |
| 3. | 18B11CI916 | CSE | Statistical Methods and Data Analysis | 3 | 0 | 0 | 3 | 3 | III |
| 4. | 18B17CI976 | CSE | Statistical Methods and Data Analysis Lab | 0 | 0 | 2 | 2 | 1 | III |
| 5. | 18B11EC913 | ECE/ CSE | Robotics & Machine Vision | 3 | 0 | 0 | 3 | 3 | VII/V III |
| 6. | 18B17EC973 | ECE | Robotics Programming Lab | 0 | | 2 | 2 | 1 | VII/V III |
| 7. | 18B17CI997 | CSE | Internet of Things Lab | 0 | 0 | 2 | 2 | 1 | VII/V III |
| 8. | 18B11CI937 | CSE | Internet of Things Technology and Applications | 2 | 0 | 0 | 2 | 2 | VII/V III |
| 9. | 18B11CI918 | CSE | Machine Learning | 3 | 0 | 0 | 3 | 3 | VI |
| | | | Total | | | | 23 | 20 | |

*Students of ECE will be registered in course of 'Introduction to Artificial Intelligence' as prerequisite of 'Artificial Intelligence and Applications'.

Minor Specialization offered by Mechanical Engg. dept. with ECE dept. (for ECE and MEC students):

Industrial Automation

| S. No. | Course Code | Dept. | Title of Course | Contact Hours | | | | Credits | Sem. |
|--------|---------------------------|-------|--|---------------|---|---|-----------|-----------|------|
| | | | | L | T | P | Total | | |
| 1 | 18B11EC914 | ECE | Transducers Engineering | 3 | 0 | 0 | 3 | 3 | IV |
| 2 | 18B17EC974 | ECE | Transducers Engineering Lab | 0 | 0 | 2 | 2 | 1 | IV |
| 3 | 18B11ME911 | MEC | Robotics | 3 | 0 | 0 | 3 | 3 | V |
| 4 | 18B11EC919/ 21B11EC921 | ECE | Digital Control System (for ECE students) /Microprocessors based Control System (For MEC students) | 3 | 0 | 0 | 3 | 3 | V |
| 5 | 18B17ME971 | MEC | Robotics/CIM Lab | 0 | 0 | 2 | 2 | 1 | V |
| 6 | 18B11ME913 | MEC | Industrial Automation | 3 | 0 | 0 | 3 | 3 | VI |
| 7 | 18B11ME914 | MEC | Control of Industrial Automation | 3 | 0 | 0 | 3 | 3 | VI |
| 8 | 18B11ME912 | MEC | Special Purpose Vehicle | 3 | 0 | 0 | 3 | 3 | VII |
| | | | Total | | | | 22 | 20 | |

Minor Specialization offered by Mechanical Engg. dept. with ECE dept. (for ECE and MEC students):

Mechatronics

| S. No. | Course Code | Dept. | Title of Course | Contact Hours | | | | Credits | Sem. |
|--------|-------------|-------|--------------------------------------|---------------|---|---|-----------|-----------|------|
| | | | | L | T | P | Total | | |
| 1 | 18B11EC914 | ECE | Transducers Engineering | 3 | 0 | 0 | 3 | 3 | IV |
| 2 | 18B17EC974 | ECE | Transducers Engineering Lab | 0 | 0 | 2 | 2 | 1 | IV |
| 3 | 18B11ME917 | MEC | Vehicle Dynamics | 3 | 0 | 0 | 3 | 3 | V |
| 4 | 18B11ME915 | MEC | Computer Integrated Manufacturing | 3 | 0 | 0 | 3 | 3 | V |
| 5 | 18B17ME975 | MEC | CIM Lab | 0 | 0 | 2 | 2 | 1 | V |
| 6 | 18B11ME918 | MEC | Control of Mechanical System | 3 | 0 | 0 | 3 | 3 | VI |
| 7 | 18B11EC915 | ECE | Micro-controller and Embedded System | 3 | 0 | 0 | 3 | 3 | VI |
| 8 | 18B11ME916 | MEC | Automated Guided Vehicles | 3 | 0 | 0 | 3 | 3 | VII |
| | | | Total | | | | 22 | 20 | |

| Minor Specialization-1: Human Resource Management (offered by HSS dept.) | | | | | | | | |
|---|--------------------|--------------|------------------------------|----------|----------|----------|----------------------|----------------|
| S. No. | Course Code | Dept. | Title of Course | L | T | P | Contact Hours | Credits |
| 1 | 18B11HS911 | HSS | Human Resource Management | 3 | 0 | 0 | 3 | 3 |
| 2 | 18B11HS912 | HSS | Team Building and Leadership | 3 | 0 | 0 | 3 | 3 |
| 3 | 18B11HS913 | HSS | Performance Management | 3 | 0 | 0 | 3 | 3 |
| 4 | 18B11HS914 | HSS | Training & Development | 3 | 0 | 0 | 3 | 3 |
| 5 | 18B11HS915 | HSS | Organizational Change | 3 | 0 | 0 | 3 | 3 |
| 6 | 18B11HS916 | HSS | Negotiation & Counselling | 3 | 0 | 0 | 3 | 3 |
| 7 | 18B17HS971 | HSS | Minor Project | 0 | 0 | 4 | 4 | 2 |
| Total | | | | | | | 22 | 20 |

| Minor Specialization-2: Financial Management (offered by HSS dept.) | | | | | | | | |
|--|--------------------|--------------|---|----------|----------|----------|----------------------|----------------|
| S. No. | Course Code | Dept. | Title of Course | L | T | P | Contact Hours | Credits |
| 1 | 18B11HS918 | HSS | Fundamentals of Accounting | 3 | 0 | 0 | 3 | 3 |
| 2 | 18B11HS919 | HSS | Financial Management | 3 | 0 | 0 | 3 | 3 |
| 3 | 18B11HS920 | HSS | Financial Modelling | 3 | 0 | 0 | 3 | 3 |
| 4 | 18B11HS921 | HSS | Fundamentals of Financial Markets | 3 | 0 | 0 | 3 | 3 |
| 5 | 18B11HS922 | HSS | Security Analysis & Investment Management | 3 | 0 | 0 | 3 | 3 |
| 6 | 18B11HS923 | HSS | International Financial Management | 3 | 0 | 0 | 3 | 3 |
| 7 | 18B17HS972 | HSS | Minor Project | 0 | 0 | 4 | 4 | 2 |
| Total | | | | | | | 22 | 20 |

| Minor Specialization-3: Digital Marketing (offered by HSS dept.) | | | | | | | | |
|---|--------------------|--------------|--|----------|----------|----------|----------------------|----------------|
| S. No. | Course Code | Dept. | Title of Course | L | T | P | Contact Hours | Credits |
| 1 | 18B11HS925 | HSS | Consumer Behaviour | 3 | 0 | 0 | 3 | 3 |
| 2 | 18B11HS926 | HSS | Ethics, IPR and Cyber laws | 3 | 0 | 0 | 3 | 3 |
| 3 | 18B11HS927 | HSS | Digital Marketing research | 3 | 0 | 0 | 3 | 3 |
| 4 | 18B11HS928 | HSS | Introduction to Social Media Marketing | 3 | 0 | 0 | 3 | 3 |
| 5 | 18B11HS929 | HSS | Digital Marketing | 3 | 0 | 0 | 3 | 3 |
| 6 | 18B11HS930 | HSS | Digital Marketing Analytics | 3 | 0 | 0 | 3 | 3 |
| 7 | 18B17HS973 | HSS | Minor Project | 0 | 0 | 4 | 4 | 2 |
| Total | | | | | | | 22 | 20 |

| Minor Specialization-4: Marketing (offered by HSS dept.) | | | | | | | | |
|---|--------------------|--------------|-----------------------------------|----------|----------|----------|----------------------|----------------|
| S. No. | Course Code | Dept. | Title of Course | L | T | P | Contact Hours | Credits |
| 1 | 18B11HS932 | HSS | Consumer Behaviour | 3 | 0 | 0 | 3 | 3 |
| 2 | 18B11HS933 | HSS | Marketing Management | 3 | 0 | 0 | 3 | 3 |
| 3 | 18B11HS934 | HSS | Marketing Research | 3 | 0 | 0 | 3 | 3 |
| 4 | 18B11HS935 | HSS | Services Marketing | 3 | 0 | 0 | 3 | 3 |
| 5 | 18B11HS936 | HSS | Brand Management | 3 | 0 | 0 | 3 | 3 |
| 6 | 18B11HS937 | HSS | Sales and Distribution Management | 3 | 0 | 0 | 3 | 3 |
| 7 | 18B17HS974 | HSS | Minor Project | 0 | 0 | 4 | 4 | 2 |
| Total | | | | | | | 22 | 20 |