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सत्यमेव जयते



स्वातंत्र्याचा अमृत महोत्सव

Govt. of Maharashtra
GOVT. COLLEGE OF ENGINEERING, KARAD
(An Autonomous Institute of Govt. of Maharashtra)
Vidyanagar, Karad -415124 Dist.- Satara

B. Tech. in Electronics and Telecommunication Engineering with Honors and Multidisciplinary Minor (Internet of Things)

Government College of Engineering, Karad

PROPOSED SCHEME OF INSTRUCTION

Programme: Honors and Multidisciplinary Minor (Internet of Things)

- Selection of the relevant MOOC course should be with the prior permission of Head of Department
- To get B. Tech in Electronics and Telecommunication with Honors and Multidisciplinary Minor (Internet of Things) student need to earn extra 18 credits by completing 5 courses (One course / semester) as mentioned below.
- Honor courses can be completed through online platforms (NPTEL/SWAYAM).
- Duration of MOOC Course should be 8-12 weeks.
- Students can choose any one specialization given by the department and complete all the assigned courses under the specialization to earn total 194 credits which consists of 176 credits of regular Multidisciplinary Minor courses and 18 credits of Honor courses.
- Student should complete the MOOC course certification and submit the copy of certificate to controller of examinations, GCE, Karad through program coordinator .

| Sr. No. | Course Code | Course Title | Credits | Major Semester |
|---------|-------------|--|---------|----------------|
| 1 | EXHM-0401 | Introduction to Internet of Things | 04 | IV |
| 2 | EXHM-0501 | Introduction to Security of Cyber Physical Systems | 04 | V |
| 3 | EXHM-0601 | Sensing, Computing and Communication | 04 | VI |
| 4 | EXHM-0701 | Embedded Systems for IoT | 03 | VII |
| 5 | EXHM-0801 | IoT with Arduino, ESP, and Raspberry Pi | 03 | VIII |

PROGRESSIVE TOTAL CREDITS: 18



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B. Tech. in Electronics and Telecommunication Engineering with Honors with Research and Multidisciplinary Minor

Government College of Engineering, Karad

PROPOSED SCHEME OF INSTRUCTION

Programme: Honors with Research and Multidisciplinary Minor

The student will work on Research Project or Dissertation for 18 Credits in the Fourth Year in respective discipline. The distribution of 18 credits for Research project in Sem-VII and Sem-VIII is given below.

To get B. Tech in Electronics and Telecommunication with Honors with Research and Multidisciplinary Minor student need to earn total 194 Credits which consists of 176 credits of regular Multidisciplinary Minor courses and 18 credits of Research courses.

(Major: Semester – VII)

| Sr. No. | Course Code | Course Title | L | P | Contact Hrs/Wk | Course Credits | EXAM SCHEME | | |
|--------------|-------------|-------------------------------------|-----------|-----------|----------------|----------------|-------------|------------|------------|
| | | | | | | | PBE-I | PBE-II | TOTAL |
| 1 | EXHRM-0701 | Intellectual Property Rights (MOOC) | -- | -- | -- | 03 | -- | -- | -- |
| 2 | EXHRO-0702 | Research Project Phase - I | -- | 12 | 12 | 06 | 100 | 100 | 200 |
| Total | | | -- | 12 | 12 | 09 | 100 | 100 | 200 |

(Major: Semester – VIII)

| Sr. No. | Course Code | Course Title | L | P | Contact Hrs/Wk | Course Credits | EXAM SCHEME | | |
|--------------|-------------|----------------------------|-----------|-----------|----------------|----------------|-------------|------------|------------|
| | | | | | | | PBE-I | PBE-II | TOTAL |
| 1 | EXHRO-0801 | Research Project Phase -II | -- | 18 | 18 | 09 | 100 | 100 | 200 |
| Total | | | -- | 18 | 18 | 09 | 100 | 100 | 200 |

L- Lecture

P-Practical

FA- Formative Assessment SA - Summative Assessment (For Laboratory End Semester performance) PBE-I- Project-based Examination (For Laboratory Mid Semester Performance)

PBE- II Project-based Examination (For Laboratory End Semester Performance)

PROGRESSIVE TOTAL CREDITS: 18

Guidelines:-

- Selection of the relevant MOOC course should be with the prior permission of Head of Department.
- Duration of MOOC Course should be 8-12 weeks.

- Student should complete the MOOC course certification and submit the copy of certificate to controller of examinations, GCE, Karad through program coordinator.

Students will work on research project for 18 credits in the semester VII –VIII in the respective Major Engineering/Technology discipline. These 18 credits will be over and above the 176 credits prescribed for four year multidisciplinary bachelor's degree in Engg/Tech Program.



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Vidyanagar, Karad -415124 Dist.- Satara

B. Tech. in Electronics and Telecommunication Engineering with Double Minors (Multidisciplinary and Specialization Minors)

Government College of Engineering, Karad

PROPOSED SCHEME OF INSTRUCTION

Programme: Double Minors (Multidisciplinary and Specialization Minors)

- Selection of the relevant MOOC course should be with the prior permission of Head of Department.
- To get B. Tech in Electronics and Telecommunication Engineering with Double Minors (Multidisciplinary and Specialization Minors) student need to earn extra 18 credits by completing minor courses
- Minor courses can be completed through online platforms. (NPTEL/SWAYAM).
- Duration of MOOC Course should be 8-12 weeks.
- Students can choose any one specialization given by the department and complete all the six courses under the specialization to earn total 194 credits which consists of 176 credits of regular Multidisciplinary Minor courses and 18 credits of Honor courses.
- Student should complete the MOOC course certification and submit the copy of certificate to controller of examinations, GCE, Karad through program coordinator

| Sr. No. | Course Code | Course Title | Credits | Major Semester |
|---------|-------------|------------------------------|---------|----------------|
| 1 | EXDM-0401 | Signal and Systems | 04 | IV |
| 2 | EXDM-0501 | Digital Signal Processing | 04 | V |
| 3 | EXDM-0601 | Multi-rate Signal Processing | 04 | VI |
| 4 | EXDM-0701 | Image and Video Processing | 03 | VII |
| 5 | EXDM-0801 | Speech Processing | 03 | VIII |

PROGRESSIVE TOTAL CREDITS: 18

Guidelines: - Students will take up to 5–6 additional courses in another Engineering/ Technology/ Emerging Area of Specialization of 18 credits distributed over semester III –VIII. These 18 credits will be over and above the 176 credits prescribed for four-year multidisciplinary bachelor's degree in Engg/Tech Program.