



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
HONORS IN ELECTRONICS & INSTRUMENTATION ENGINEERING (HEI)
HONORS CURRICULUM
EQUIVALENT MOOCs - ODD SEMESTER, JULY-DEC 2020, AY 2020-21

| S. No | Course Code | Course Name | EQUIVALENT COURSES OFFERED BY | | | | | | | | | |
|--------------------------------|-------------|--|---|---|--|------------------|---|---------------|------------------------|---|---------------|--|
| | | | SWAYAM-NPTEL | | | COURSERA / UDEMY | | | SPOKEN TUTORIAL - IITB | | | |
| | | | Course Name | C | Course Dates* | Course Name | C | Course Dates* | Course Name | C | Course Dates* | |
| HONORS ELECTIVE COURSES | | | | | | | | | | | | |
| 1 | U18HEI1001 | Biomedical signal and Image Processing | Biomedical Signal Processing <i>Prof. Sudiptha Mukhopadhyaya IIT KGP</i> | 3 | CCD: Next Sem LDR: Next Sem | -- | - | CCD: LDR: | -- | - | CCD: LDR: | |
| 2 | U18HEI1002 | Advanced Signal Processing | Multirate Signal Processing <i>Prof. David Kovilpillai IITM</i> | 3 | CCD: Next Sem LDR: Next Sem | -- | - | CCD: LDR: | -- | - | CCD: LDR: | |
| 3 | U18HEI1003 | Advanced Image Processing and Applications | Image Signal Processing <i>Prof. A.N. Rajagopalan IITM</i> | 3 | CCD: 14.09.2020 LDR: 21.09.2020 | -- | - | CCD: LDR: | -- | - | CCD: LDR: | |
| 4 | U18HEI1004 | Verilog HDL for VLSI Design | Hardware Modeling using Verilog <i>Prof. Indranil Sengupta IIT KGP</i> | 2 | CCD: 06.11.2020 LDR: 13.11.2020 | -- | - | CCD: LDR: | -- | - | CCD: LDR: | |
| 5 | U18HEI1005 | Digital VLSI Testing | Digital VLSI Testing <i>Prof. Santanu Chattopadhyay IIT KGP</i> | 3 | CCD: 14.09.2020 LDR: 21.09.2020 | -- | - | CCD: LDR: | -- | - | CCD: LDR: | |

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| 6 | U18HEI1006 | Low power VLSI Design | Low power VLSI Circuits & Systems <i>Prof. Ajit Pal IIT KGP</i> | 3 | CCD: Next Sem | - | - | CCD: | -- | - | CCD: |
| | | | | | LDR: Next Sem | | | LDR: | | | LDR: |
| 7 | U18HEI1007 | Advanced Sensor Design | Sensors and Actuators <i>Prof. Hardik Pandya IISC</i> | 3 | CCD: Next Sem | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: Next Sem | | | LDR: | | | LDR: |
| 8 | U18HEI1008 | Robotics and Automation | Robotics <i>Prof. D. K. Pratihar IIT KGP</i> | 2 | CCD: 14.09.2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21.09.2020 | | | LDR: | | | LDR: |
| 9 | U18HEI1009 | Advanced Instrumentation Systems | Industrial Automation And Control <i>Prof. Sudiptha Mukhopadhyaya IIT KGP</i> | 3 | CCD: Next Sem | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: Next Sem | | | LDR: | | | LDR: |
| 10 | U18HEI1010 | Embedded Systems Design | Introduction to Embedded System Design <i>Prof. Dhananjay V. Gadre Prof. Badri N Subudhi IIT J</i> | 3 | CCD: 14.09.2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21.09.2020 | | | LDR: | | | LDR: |
| 11 | U18HEI1011 | Advanced IoT | Introduction to internet of things <i>Prof. Sudip Misra IIT KGP</i> | 3 | CCD: 14.09.2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21.09.2020 | | | LDR: | | | LDR: |
| 12 | U18HEI1012 | Artificial Intelligence | Artificial Intelligence Search Methods For Problem Solving <i>Prof. Deepak Khemani IITM</i> | 3 | CCD: 14.09.2020 | -- | - | CCD: | -- | - | CCD: |
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| 13 | U18HEI1013 | Machine Learning | Introduction to Machine Learning <i>Prof. Balaraman Ravindran IITM</i> | 3 | CCD: 14.09.2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21.09.2020 | | | LDR: | | | LDR: |
| 14 | U18HEI1014 | Advanced Communications | Modern digital communication techniques <i>Prof. Suvara Sekhar Das IIT KGP</i> | 3 | CCD: Next Sem | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: Next Sem | | | LDR: | | | LDR: |
| 15 | U18HEI1015 | Fibre Optic Communication Techniques | Fiber Optic Communication Technology <i>Prof. Deepa Venkitesh IITM</i> | 3 | CCD: 14.09.2020 | -- | - | CCD: | -- | - | CCD: |
| | | | | | LDR: 21.09.2020 | | | LDR: | | | LDR: |

- I. In exigency situations such as the student already completed the listed compulsory courses(s) on his/her own interest during previous semesters through valid MOOCs etc, the HoD in consultation with Dean-AA shall propose an alternative course(s) for the specific scenario, after verification of relevant documents.
- II. By the end of April of every academic year, the department in consultation with Dean-AA, shall
- notify the list of equivalent courses in SWAYAM-NPTEL MOOCs / other standard MOOCs against the list of courses notified under Honours curriculum
 - propose a new course(s) in the place of any listed course(s) in the Honours curriculum, in case no equivalent course is found in MOOCs

*C: Credits ; CCD: Course Commencement Date; LDR: Last Date of Registration

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| - | Minor Laboratory Courses | Laboratory Courses (any 2 courses) - TO BE TAKEN IN THE MINOR DEPARTMENT | | | 1 Credit per Lab Course |
| 16 | | U18HEI1016 | Advanced Instrumentation Lab | | |
| 17 | | U18HEI1017 | Advanced Signal Processing Lab | | |
| 18 | | U18HEI1018 | Advanced VLSI Lab | | |
| 19 | | U18HEI1019 | Embedded Applications Lab | | |

Date: 17-07-2020

MOOCs Coordinator

Head of the Department
E&I Engineering

Dean, Academic Affairs