

**T.T. (Semester VI) B.TECH. Internet of Things (IOT)**  
**Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (HME) (CBCGS- HME 2020)**  
**TCET Autonomy scheme (w.e.f. A.Y. 2020-21)**

| Course Description        |               |                                       | Teaching Scheme (Program Specific)   |          |           |               |              | Examination scheme                                       |   |           |               |                  |           |                      |                |       |       |
|---------------------------|---------------|---------------------------------------|--|----------|-----------|---------------|--------------|--|---|-----------|---------------|------------------|-----------|----------------------|----------------|-------|-------|
| Sr. No.                   | Course Code   | Course Title                          | Modes of Teaching / Learning / Weightage   |          |           |               |              | Credits  | Modes of Continuous Assessment / Evaluation |           |               |                  |           |                      |                |       |       |
|                           |               |                                       | Hours Per Week   |          |           |               | Theory       |  | Tutorial                                    | Practical | Contact Hours | Theory (100/50)  |           | Practical/ Oral (25) | Term Work (25) | Total |       |
|                           |               |                                       | Theory   | Tutorial | Practical | Contact Hours |              |  |   |           |               | 40/20            |           |                      |                |       | 60/30 |
|                           |               |                                       |  |          |           |               |              |  |   |           |               | IA               | ESE       |                      |                |       |       |
| ISA                       | IE            | (75/35)                               |  |          |           |               |              |  |   |           |               |                  |           |                      |                |       |       |
| 1                         | PCC-IOT601    | Cloud Computing                       | 3  | 1        | -         | 4             | 4            | 20   | 20  | 60        | -             | 25               | 125       |                      |                |       |       |
| 2                         | PCC-IOT602    | Wireless Sensor Networks              | 3  | 1        | 2         | 6             | 5            | 20   | 20  | 60        | 25            | 25               | 150       |                      |                |       |       |
| 3                         | PCC-IOT603    | Machine Learning                      | 3  | -        | 2         | 5             | 4            | 20   | 20  | 60        | 25            | 25               | 150       |                      |                |       |       |
| 4                         | PEC - IOT601X | Professional Elective II              | 3  | -        | 2@        | 5             | 4            | 20   | 20  | 60        | 25            | 25               | 150       |                      |                |       |       |
| 5                         | OEC-IOT601X   | Open Elective I                       | 3  | -        | -         | 3             | 3            | 20   | 20  | 60        | -             | -                | 100       |                      |                |       |       |
| <b>Total</b>              |               |                                       | <b>15</b>  | <b>2</b> | <b>6</b>  | <b>23</b>     | <b>20</b>    | <b>Total marks</b>                                       |   |           |               |                  |           | <b>675</b>           |                |       |       |
| <b>Course Description</b> |               |                                       | <b>Non Credited Mandatory Course(Passing is mandatory for this course)</b>   |          |           |               |              |  |   |           |               | <b>Term Work</b> |           |                      |                |       |       |
| 1                         | MC-IOT601     | Essence of Indian Knowledge Tradition | 1  | -        | -         | 1             | (Non Credit) | Passing is mandatory for this course                     |   |           |               | 25               | <b>25</b> |                      |                |       |       |
| <b>Course Description</b> |               |                                       | <b>Contact Hrs. during Week End / Semester Break/ End of Semester (Between 21<sup>st</sup> and 25<sup>th</sup> Week)</b>                 |          |           |               |              |  |   |           |               | <b>Term work</b> |           |                      |                |       |       |
| <b>1</b>                  | SI-IOT601     | Summer Internship                     | -  | -        | -         | 160* - 240*   | 4*-6*        | Non Grant Term work (based on the Presentation & Report) |   |           |               | 50               | <b>50</b> |                      |                |       |       |
| <b>Course Description</b> |               |                                       | <b>Contact Hrs. during Week End / Semester Break/ End of Semester (Between 21<sup>st</sup> and 25<sup>th</sup> Week)/During Semester</b> |          |           |               |              |  |   |           |               |                  |           |                      |                |       |       |
| 1                         | AP-IOT601     | Activity Points                       | -  | -        | -         | 52#           | -            | -  | -   | -         | -             | -                | -         |                      |                |       |       |

|   |               |   | Teaching scheme Holistic and Multidisciplinary Education(HME) |          |            |            |           | Assessment / Evaluation Scheme                             |    |        |  | Term Work  |
|---|---------------|---|---|----------|------------|------------|-----------|--|----|--------|--|------------|
|   |               |   |   |          |            |            |           | Presentation   |    | Report |  |            |
|   |               |   | (Conducted in the beginning of Semester during first 3 Weeks) |          |            |            |           | AC   | AC |        |  |            |
| 1 | ESD-IOT601    | Employability Skill Development - IV                            | -   | -        | 30         | 30         | 1         | Based on Parameters Decided by Training and Placement Cell |    |        |  | 50         |
| 2 | HSD-IOTPS601  | Professional Skills- VI (Industry / Research /Entrepreneurship) | 15  | -        | 30         | 45         | 2         | 50   |    | 25     |  | 75         |
| 3 | HME IOTPBL601 | Project Based Learning - IV                                     | -   | -        | 30         | 30         | 1         | 25   |    | -      |  | 25         |
| 4 | HME IOTRBL601 | Research Based Learning II                                      | -   | -        | 30         | 30         | 1         | 25   |    | 25     |  | 50         |
|   |               | <b>Total</b>  | <b>15</b>   | <b>-</b> | <b>120</b> | <b>135</b> | <b>5</b>  | <b>Total marks</b>   |    |        |  | <b>200</b> |
|   |               | <b>Grand Total</b>  |   |          |            |            | <b>29</b> | <b>Grand Total marks:</b>                                  |    |        |  | <b>950</b> |

| PROFESSIONAL ELECTIVE II |                             |        | OPEN ELECTIVE I |   |
|--------------------------|-----------------------------|--------|-----------------|---|
| Course Code              | Course name                 | Domain | Course Code     | Course name                                 |
| PEC-IOT6011              | Mobile Computing            | 1      | OEC-IOT6011     | Digital Marketing                           |
| PEC-IOT6012              | Software Engineering        | 2      | OEC-IOT6012     | Software Process Automation                 |
| PEC-IOT6013              | Digital Image Processing    | 3      | OEC-IOT6013     | Entrepreneurship Development and Management |
| PEC-IOT6014              | Foundation for Data Science | 4      | OEC-IOT6014     | Cyber Security & Laws                       |
| PEC-IOT6015              | Block chain                 | 5      | OEC-IOT6015     | Reliability Engineering                     |
|                          |                             |        | OEC-IOT6016     | Product Life Cycle management               |

\*This is part of Summer Internship but can start in winter. Students may go upto 240 hrs. to acquire maximum 6 credits in Semester 6

Total hrs. mentioned should be completed till end of Semester 6. Credits will be awarded at the end of 6<sup>th</sup> Semester and will be reflected in the Grade Card of 6<sup>th</sup> Semester.

Student will get 1 year span to acquire the credits. Students should collectively acquire total contact hrs in below given activities in a span of 1 year. Student will submit a report to earn Term work marks in internship.

**Following activities should be considered for Summer Internship:-**

1) Participation in inhouse internship at the end of 5<sup>th</sup> and 6<sup>th</sup> Semester of 2 week each.

2) Other activity which also will be considered are: Participation in Hackathon, Development of new Product/ Business Plan / Registration of start-up, Participation in IPR workshop/Leadership talks/Idea/Design / Innovation/Technical Expos, Internship with Industry / Govt. / NGO/ PSU/MSME/Online Internship, Long Term Goals under Rural Internship

Note:- For Above Activities mentioned in point 2, if Student is part of Organizing Committee or Participating a Competition at University/State/National/international Level then it will be considered as Internship else it will be considered as Activity Points.

@ As per AICTE, Students has to earn 100 Points by participating in 400 Hrs. of activities during 4 years of Engineering. After Completing 48 hrs. of Activities, Students can earn 12 Points. These points will not be reflected in Grade Card. Separate transcript will be issued to students after completion of Final Year.

**Dr. Sujata Alegavi**  
HoD-B.Tech (IoT), BoS Chairman

**Dr. Sheetal Rathi**  
Dean(Academics), Member Secretary  
Internal Academic Board & NEP  
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**Dr. B .K. Mishra**  
Principal ,Chairman Academic Council