

Scheme of  
UNDERGRADUATE DEGREE COURSE

B.Tech. V & VI Semester  
Computer Science & Engineering  
(Data Science)



Rajasthan Technical University, Kota  
Effective from session: 2021-22



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Teaching & Examination Scheme B.Tech.: Computer Science & Engineering (Data Science) 3<sup>rd</sup> Year - V Semester

| THEORY                |          |         |                                                           |                  |   |   |         |     |     |       |     |
|-----------------------|----------|---------|-----------------------------------------------------------|------------------|---|---|---------|-----|-----|-------|-----|
| SN                    | Category | Course  |                                                           | Contact hrs/week |   |   | Marks   |     |     |       | Cr  |
|                       |          | Code    | Title                                                     | L                | T | P | Exm Hrs | IA  | ETE | Total |     |
| 1                     | PCC      | 5CDS-01 | Data Mining-Concepts and Techniques                       | 2                | 0 | 0 | 2       | 30  | 70  | 100   | 2   |
| 2                     | PCC      | 5CDS-02 | Compiler Design                                           | 3                | 0 | 0 | 3       | 30  | 70  | 100   | 3   |
| 3                     |          | 5CDS-03 | Operating System                                          | 3                | 0 | 0 | 3       | 30  | 70  | 100   | 3   |
| 4                     |          | 5CDS-04 | Data visualization- R Programming/ Power BI               | 3                | 0 | 0 | 3       | 30  | 70  | 100   | 3   |
| 5                     |          | 5CDS-05 | Analysis of Algorithm                                     | 3                | 0 | 0 | 3       | 30  | 70  | 100   | 3   |
| 6                     |          |         | Professional Elective (Any One)                           |                  |   |   |         |     |     |       |     |
| 7                     | PEC      | 5CDS-11 | Fundamentals of Block chain                               | 2                | 0 | 0 | 2       | 30  | 70  | 100   | 2   |
| 8                     |          | 5CDS-12 | Probability & Statistics for Data Science                 |                  |   |   |         |     |     |       |     |
| 9                     |          | 5CDS-13 | Programming for Data Sciences                             |                  |   |   |         |     |     |       |     |
|                       |          |         | <b>Sub Total</b>                                          | 16               | 0 | 0 |         | 180 | 420 | 600   | 16  |
| PRACTICAL & SESSIONAL |          |         |                                                           |                  |   |   |         |     |     |       |     |
| 8                     | PCC      | 5CDS-21 | R Programming Lab                                         | 0                | 0 | 2 | 2       | 60  | 40  | 100   | 1   |
| 9                     |          | 5CDS-22 | Compiler Design Lab                                       | 0                | 0 | 2 | 2       | 60  | 40  | 100   | 1   |
| 10                    |          | 5CDS-23 | Analysis of Algorithm Lab                                 | 0                | 0 | 2 | 2       | 60  | 40  | 100   | 1   |
| 11                    |          | 5CDS-24 | Advanced Java Lab                                         | 0                | 0 | 2 | 2       | 60  | 40  | 100   | 1   |
| 12                    | PSIT     | 5CDS-30 | Industrial Training                                       | 0                | 0 | 1 |         | 60  | 40  | 100   | 2.5 |
| 13                    | SODE CA  | 5CDS-00 | Social Outreach, Discipline & Extra Curricular Activities |                  |   |   |         |     | 100 | 100   | 0.5 |
|                       |          |         | <b>Sub- Total</b>                                         | 0                | 0 | 9 |         | 300 | 300 | 600   | 7   |
|                       |          |         | <b>TOTAL OF V SEMESTER</b>                                | 16               | 0 | 9 |         | 480 | 720 | 1200  | 23  |

**L:** Lecture, **T:** Tutorial, **P:** Practical, **Cr:** Credits

**ETE:** End Term Exam, **IA:** Internal Assessment

Office of Dean Academic Affairs  
Rajasthan Technical University, Kota



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Teaching & Examination Scheme B.Tech.: Computer Science & Engineering (Data Science) 3<sup>rd</sup> Year - VI Semester

| THEORY                |          |         |                                                           |                  |   |    |          |     |     |       |      |
|-----------------------|----------|---------|-----------------------------------------------------------|------------------|---|----|----------|-----|-----|-------|------|
| SN                    | Category | Course  |                                                           | Contact hrs/week |   |    | Marks    |     |     |       | Cr   |
|                       |          | Code    | Title                                                     | L                | T | P  | Ex m Hrs | IA  | ETE | Total |      |
| 1                     | PCC      | 6CDS-01 | Digital Image Processing                                  | 2                | 0 | 0  | 2        | 30  | 70  | 100   | 2    |
| 2                     | PCC      | 6CDS-02 | Machine Learning                                          | 3                | 0 | 0  | 3        | 30  | 70  | 100   | 3    |
| 3                     |          | 6CDS-03 | Information Security Systems                              | 3                | 0 | 0  | 3        | 30  | 70  | 100   | 2    |
| 4                     |          | 6CDS-04 | Computer Architecture and Organization                    | 3                | 0 | 0  | 3        | 30  | 70  | 100   | 3    |
| 5                     |          | 6CDS-05 | Principles of Artificial Intelligence                     | 3                | 0 | 0  | 3        | 30  | 70  | 100   | 2    |
| 6                     |          | 6CDS-06 | Cloud Computing                                           |                  |   |    |          |     |     |       | 3    |
| 7                     |          | 6CDS-11 | Artificial Neural Network                                 |                  |   |    |          |     |     |       |      |
| 8                     | PEC      | 6CDS-12 | Nature Inspired Computing                                 | 2                | 0 | 0  | 2        | 30  | 70  | 100   | 2    |
| 9                     | PEC      | 6CDS-13 | Big Data Analytics & Hadoop                               |                  |   |    |          |     |     |       |      |
|                       |          |         | <b>Sub Total</b>                                          | 16               | 0 | 0  |          | 180 | 420 | 600   | 17   |
| PRACTICAL & SESSIONAL |          |         |                                                           |                  |   |    |          |     |     |       |      |
| 8                     | PCC      | 6CDS-21 | Digital Image Processing Lab                              | 0                | 0 | 2  | 2        | 60  | 40  | 100   | 1    |
| 9                     |          | 6CDS-22 | Machine Learning Lab                                      | 0                | 0 | 2  | 2        | 60  | 40  | 100   | 1    |
| 10                    |          | 6CDS-23 | Python Lab                                                | 0                | 0 | 2  | 2        | 60  | 40  | 100   | 1    |
| 11                    |          | 6CDS-24 | Mobile Application Development Lab                        | 0                | 0 | 2  | 2        | 60  | 40  | 100   | 1    |
| 12                    | SODE CA  | 6CDS-00 | Social Outreach, Discipline & Extra Curricular Activities |                  |   |    |          |     | 100 | 100   | 0.5  |
|                       |          |         | <b>Sub- Total</b>                                         | 0                | 0 | 12 |          | 240 | 260 | 500   | 6.5  |
|                       |          |         | <b>TOTAL OF V SEMESTER</b>                                | 17               | 0 | 12 |          | 420 | 680 | 1100  | 23.5 |

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