

**Faculty of Science and Technology**

**Programme Structure**

For

First Year

**Bachelor of Technology (Artificial Intelligence and Data Science)**

Programme Code: BTECAD

Pattern 2024

With Effect from Academic Year 2025 – 2026

1. Title: Artificial Intelligence and Data Science Programme Structure Form No: IQAC-101

SEM-I

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Faculty** | | ***Science and Technology*** | | | | **Pattern** | | | | | 2024 | | |
| **Department** | | **Engineering Sciences** | | | | **Date (w.e.f.)** | | | | |  | | |
| **Programme** | | **B.Tech (Artificial Intelligence and Data Science) (BTECAD)** | | | |  | | | | |  | | |
| **Course Type** | **Course Code** | | **Course Name** | **Teaching Scheme**  **(Hours/Week)** | | | | **Credit** | **Examination Scheme and Marks** | | | |
|  |  | |  | **L** | **T** | | **P** | **C** | **CIE** | **ESE** | | **Total** |
| BSC | BTECAD24101 | | Applied Mathematics | 3 | 1 | | 0 | 4 | 60 | 40 | | 100 |
| ESC | BTECAD24102 | | Fundamental of Electronics | 3 | 0 | | 0 | 3 | 60 | 40 | | 100 |
| BSC | BTECAD24103 | | Computer Organization | 2 | 0 | | 0 | 2 | 50 | 00 | | 50 |
| ESC | BTECAD24104 | | Introduction to Computer Programming | 3 | 0 | | 0 | 3 | 60 | 40 | | 100 |
| ESC | BTECAD24105 | | Fundamental of Electronics Lab | 0 | 0 | | 2 | 1 | 15 | 10 | | 25 |
| ESC | BTECAD24106 | | Introduction to Computer Programming Lab | 0 | 0 | | 2 | 1 | 15 | 10 | | 25 |
| VSEC | BTECAD24107 | | Web Technology Lab | 1 | 0 | | 2 | 2 | 30 | 20 | | 50 |
| CC | BTECAD24108 | | Capstone Project - I | 0 | 0 | | 4 | 2 | 50 | 00 | | 50 |
|  | BTECAD24109 | | Induction Training |  |  | | 1\* | 0 |  |  | | 00 |
| IKS | IKS24AI01 | | Indian Knowledge System Concepts and Applications in Engineering | 2 | 0 | | 0 | 2 | 50 | 00 | | 50 |
|  |  | | Total | 16 | 01 | | 06 | 20 | 390 | 160 | | 550 |
| **Instructions, if any: 1 Theory/Tutorial Hour = 1 Credit, 2 Practical hours = 1 Credit** | | | | | | | | | | | | |

SEM-II

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| **Faculty** | | ***Science and Technology*** | | | | **Pattern** | | | | | 2024 | |
| **Department** | | **Engineering Sciences** | | | | **Date (w.e.f.)** | | | | |  | |
| **Programme** | | **B.Tech (Artificial Intelligence and Data Science) (BTECAD)** | | | |  | | | | |  | |
| **Course Type** | **Course Code** | | **Course Name** | **Teaching Scheme**  **(Hours/Week)** | | | | **Credit** | **Examination Scheme and Marks** | | | |
|  |  | |  | **L** | **T** | | **P** | **C** | **CIE** | **ESE** | | **Total** |
| AEC | BTECAD24201 | | Corporate Communication | 1 | 1 | | 0 | 2 | 50 | 00 | | 50 |
| ESC | BTECAD24201 | | Prompt Engineering | 2 | 0 | | 0 | 2 | 50 | 00 | | 50 |
| BSC | BTECAD24202 | | Linear Algebra and  Statistics | 3 | 1 | | 0 | 4 | 60 | 40 | | 100 |
| BSC | BTECAD24203 | | Processor Architecture | 3 | 0 | | 0 | 3 | 60 | 40 | | 100 |
| PCC | BTECAD24204 | | Logic  Development and Programming | 2 | 0 | | 0 | 2 | 30 | 20 | | 50 |
| PCC | BTECAD24205 | | Logic Development and  Programming Lab | 0 | 0 | | 2 | 1 | 15 | 10 | | 25 |
| BSC | BTECAD24206 | | Processor Architecture Lab | 0 | 0 | | 2 | 1 | 15 | 10 | | 25 |
| VSEC | BTECAD24207 | | Introduction to Microcontroller Programming Lab | 1 | 0 | | 2 | 2 | 30 | 20 | | 50 |
| ESC | BTECAD24208 | | Technical Skill Development Lab-1  (OOP using C++) | 0 | 0 | | 2 | 1 | 15 | 10 | | 25 |
| CC | BTECAD24209 | | Capstone Project - II | 0 | 0 | | 4 | 2 | 50 | 00 | | 50 |
| AEC | AE24AI01 | | Corporate Communication | 1 | 1 | | 0 | 2 | 50 | 00 | | 50 |
|  |  | | Total | 12 | 04 | | 08 | 20 | 375 | 150 | | 525 |
| **Instructions, if any: 1 Theory/Tutorial Hour = 1 Credit, 2 Practical hours = 1 Credit** | | | | | | | | | | | | |

Head of the Department Dean

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ERP to provide document upload facility for evidencing – BoS meeting MoM, AC MoM, final approved grid with BoS chairman signature, etc.