

Chaudhary Ranbir Singh University, Jind

Scheme of Examination for Under Graduate Programme

Bachelor of Technology (Computer Science - Artificial Intelligence and Machine Learning)

1st Semester

| Course Code | Nomenclature | Credit | Contact Hours Per Week | | | | Internal Assessment | | External Assessment | | Total Marks | | Min Pass Marks | |
|----------------|------------------------------|--------|------------------------|---|---|----|---------------------|---|---------------------|----|-------------|----|----------------|-----|
| | | | L | T | P | CH | T | P | T | P | T | P | Int | Ext |
| 24-BTHS-101 | Communication Skills | 4 | 2 | 1 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTBS-101 | Mathematics - I | 4 | 3 | 1 | 0 | 4 | 20 | 0 | 80 | 0 | 100 | 0 | 08 | 32 |
| 24-BTBS-102 | Physics | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTES-101 | Mathematical Concepts for AI | 4 | 3 | 1 | 0 | 4 | 20 | 0 | 80 | 0 | 100 | 0 | 08 | 32 |
| Semester Total | | 16 | 11 | 3 | 4 | 18 | | | | | | | | |

2nd Semester

| Course Code | Nomenclature | Credit | Contact Hours Per Week | | | | Internal Assessment | | External Assessment | | Total Marks | | Min Pass Marks | |
|----------------|----------------------------------|--------|------------------------|---|---|----|---------------------|----|---------------------|----|-------------|----|----------------|-----|
| | | | L | T | P | CH | T | P | T | P | T | P | Int | Ext |
| 24-BTHS-201 | Design Thinking | 1 | 0 | 0 | 2 | 2 | 0 | 25 | 0 | 0 | 0 | 25 | 10 | 0 |
| 24-BTBS-201 | Mathematics - II | 4 | 3 | 1 | 0 | 4 | 20 | 0 | 80 | 0 | 100 | 0 | 08 | 32 |
| 24-BTBS-202 | Chemistry | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTES-201 | Problem Solving and Programming | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTES-202 | Modern Computer Architecture | 3 | 3 | 0 | 0 | 3 | 15 | 0 | 60 | 0 | 75 | 0 | 06 | 24 |
| 24-BTCS-201 | Discrete Mathematical Structures | 4 | 3 | 1 | 0 | 4 | 20 | 0 | 80 | 0 | 100 | 0 | 08 | 32 |
| 24-BTCS-202 | Software Engineering | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| Semester Total | | 24 | 18 | 2 | 8 | 28 | | | | | | | | |

In addition to above said courses, student need to undergo mandatory induction programme in 1st Year as per AICTE norms.

3rd Semester

| Course Code | Nomenclature | Credit | Contact Hours Per Week | | | | Internal Assessment | | External Assessment | | Total Marks | | Min Pass Marks | |
|----------------|-----------------------------|--------|------------------------|---|----|----|---------------------|---|---------------------|----|-------------|----|----------------|-----|
| | | | L | T | P | CH | T | P | T | P | T | P | Int | Ext |
| 24-BTPC-301 | Object Oriented Programming | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTPC-302 | Data Structures | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTPC-304 | Machine Learning | 4 | 4 | 0 | 0 | 4 | 20 | 0 | 80 | 0 | 100 | 0 | 20 | 80 |
| 24-BTPC-305 | Artificial Intelligence | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTHS-301 | Universal Human Values | 3 | 2 | 1 | 0 | 3 | 15 | 0 | 60 | 0 | 75 | 0 | 06 | 24 |
| 24-BTPE-301 | Programming with Python | 4 | 1 | 0 | 6 | 7 | 10 | 5 | 40 | 20 | 50 | 25 | 06 | 24 |
| Semester Total | | 23 | 16 | 1 | 12 | 29 | | | | | | | | |

4th Semester

| Course Code | Nomenclature | Credit | Contact Hours Per Week | | | | Internal Assessment | | External Assessment | | Total Marks | | Min Pass Marks | |
|----------------|-----------------------------|--------|------------------------|---|----|----|---------------------|----|---------------------|----|-------------|----|----------------|-----|
| | | | L | T | P | CH | T | P | T | P | T | P | Int | Ext |
| 24-BTPC-401 | Operating System | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTPC-402 | Computer Networks | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTPC-403 | Data Science | 4 | 3 | 0 | 2 | 5 | 15 | 5 | 60 | 20 | 75 | 25 | 10 | 30 |
| 24-BTPC-404 | Data Base Management System | 4 | 3 | 0 | 2 | 5 | 20 | 0 | 80 | 0 | 100 | 0 | 08 | 32 |
| 24-BTPC-405 | Advanced Machine Learning | 4 | 3 | 0 | 2 | 5 | 20 | 0 | 80 | 0 | 100 | 0 | 08 | 32 |
| 24-BTEEC-301 | Minor Project | 3 | 3 | 0 | 0 | 3 | 0 | 15 | 0 | 60 | 0 | 75 | 06 | 24 |
| 24-BTAU-401 | Environmental Science | 0 | 3 | 0 | 0 | 3 | 15 | 0 | 60 | 0 | 75 | 0 | 06 | 24 |
| Semester Total | | 23 | 21 | 0 | 10 | 31 | | | | | | | | |

Environmental Science Paper is Zero Credit Paper but essential to pass to be eligible for award of the degree.