



BRAINWARE UNIVERSITY
School of Computational & Applied Sciences
Department of Computational Sciences
Bachelor of Computer Applications in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours) in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours with Research) in Artificial Intelligence & Machine Learning- 2026

SEMESTER – I

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|---|-----------|----------|----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL17101 | Digital Logic | 3 | 0 | 2 | 40 | 60 | 100 | 4 | Major |
| 2 | BIL10201 | Sustainability in Indian Knowledge System | 4 | 0 | 0 | 40 | 60 | 100 | 4 | Minor |
| 3 | BIL10001 | Mathematics and Numerical Methods | 3 | 0 | 0 | 40 | 60 | 100 | 3 | IC |
| 4 | AEC00005 | Functional English | 2 | 0 | 0 | 40 | 60 | 100 | 2 | AEC |
| 5 | BIL10002 | AI Foundations & Generative AI Literacy | 3 | 0 | 0 | 40 | 60 | 100 | 3 | SEC |
| 6 | VAC07019 | PC Software | 1 | 0 | 2 | 40 | 60 | 100 | 2 | VAC |
| 7 | VAC00007 | Human Values and Ethics | 2 | 0 | 0 | 40 | 60 | 100 | 2 | VAC |
| TOTAL | | | 18 | 0 | 4 | 280 | 420 | 700 | 20 | |

SEMESTER – II

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|---|-----------|----------|----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL20102 | Programming in C | 4 | 0 | 0 | 40 | 60 | 100 | 4 | Major |
| 2 | BIL29202 | Programming in C Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Minor |
| 3 | BIL20203 | Operating System | 2 | 0 | 0 | 40 | 60 | 100 | 2 | Minor |
| 4 | BIL20001 | Discrete Mathematical Structure | 3 | 0 | 0 | 40 | 60 | 100 | 3 | IC |
| 5 | AEC00002 | Communicative English | 2 | 0 | 0 | 40 | 60 | 100 | 2 | AEC |
| 6 | BIL27002 | HTML, CSS and CSS Preprocessor | 1 | 0 | 4 | 40 | 60 | 100 | 3 | SEC |
| 7 | VAC00020 | Numerical and Reasoning Ability | 2 | 0 | 0 | 40 | 60 | 100 | 2 | VAC |
| 8 | VAC00006 | Environmental Studies | 2 | 0 | 0 | 40 | 60 | 100 | 2 | VAC |
| TOTAL | | | 16 | 0 | 8 | 320 | 480 | 800 | 20 | |
| 9 | UGPC0001 | Foundations of Professional Communication | 0 | 0 | 0 | 100 | 0 | 100 | 0 | GPC |



BRAINWARE UNIVERSITY
School of Computational & Applied Sciences
Department of Computational Sciences
Bachelor of Computer Applications in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours) in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours with Research) in Artificial Intelligence & Machine Learning- 2026

SEMESTER – III

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|---|-----------|----------|-----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL30103 | Data Structure and Algorithm | 3 | 0 | 0 | 40 | 60 | 100 | 3 | Major |
| 2 | BIL39104 | Data Structure and Algorithm Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Major |
| 3 | BIL30105 | Artificial Intelligence | 3 | 0 | 0 | 40 | 60 | 100 | 3 | Major |
| 4 | BIL37204 | Python Lab | 2 | 0 | 4 | 40 | 60 | 100 | 4 | Minor |
| 5 | BIL30001 | Probability and Statistics | 3 | 0 | 0 | 40 | 60 | 100 | 3 | IC |
| 6 | AEC00006 | Modern Indian Language A. Hindi B. Bengali C. Alternative English D. MOOC | 2 | 0 | 0 | 40 | 60 | 100 | 2 | AEC |
| 7 | BIL37002 | Internet and Web Technologies | 2 | 0 | 2 | 40 | 60 | 100 | 3 | SEC |
| TOTAL | | | 15 | 0 | 10 | 280 | 420 | 700 | 20 | |

*MOOC/Equivalent MOOC approved by BoS Chair (Evaluation scheme as per Blended Learning and MOOCs Policy)

SEMESTER – IV

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|---|-----------|----------|-----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL40106 | Database Management System | 3 | 0 | 0 | 40 | 60 | 100 | 3 | Major |
| 2 | BIL49107 | Database Management System Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Major |
| 3 | BIL40108 | Data Warehousing and Data Mining | 4 | 0 | 0 | 40 | 60 | 100 | 4 | Major |
| 4 | BIL49109 | Data Warehousing and Data Mining Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Major |
| 5 | BIL40110 | Computer Network | 3 | 0 | 0 | 40 | 60 | 100 | 3 | Major |
| 6 | BIL49205 | PHP and MySQL Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Minor |
| 7 | BIL40206 | Digital Marketing | 2 | 0 | 0 | 40 | 60 | 100 | 2 | Minor |
| 8 | AEC09001 | Communicative English Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | AEC |
| TOTAL | | | 12 | 0 | 16 | 320 | 480 | 800 | 20 | |
| 9 | UGPC0002 | Workplace Communication and Professional Skills | 0 | 0 | 0 | 100 | 0 | 100 | 0 | GPC |



BRAINWARE UNIVERSITY
School of Computational & Applied Sciences
Department of Computational Sciences
Bachelor of Computer Applications in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours) in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours with Research) in Artificial Intelligence & Machine Learning- 2026

SEMESTER –V

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|--|-----------|----------|----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL50111 | OOP using Java | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Major |
| 2 | BIL59112 | OOP using Java Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Major |
| 3 | BIL50113 | Machine Learning | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Major |
| 4 | BIL59114 | Machine Learning Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Major |
| 5 | BIL50115 | Data Analytics | 2 | 0 | 0 | 40 | 60 | 100 | 2 | Major |
| 6 | BIL50207 | Cyber Security | 4 | 0 | 0 | 40 | 60 | 100 | 4 | Minor |
| 7 | BIL58001 | Project-I / Internship | 0 | 0 | 0 | 40 | 60 | 100 | 2 | IAPC |
| TOTAL | | | 12 | 2 | 8 | 280 | 420 | 700 | 20 | |
| 8 | UGPC0003 | Advanced Professional Communication and Employability Skills | 0 | 0 | 0 | 100 | 0 | 100 | 0 | GPC |

SEMESTER – VI

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|----------------------------------|-----------|----------|-----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL60116 | Internet of Things | 3 | 0 | 0 | 40 | 60 | 100 | 3 | Major |
| 2 | BIL60117 | Deep Learning | 3 | 0 | 0 | 40 | 60 | 100 | 3 | Major |
| 3 | BIL69118 | Deep Learning Lab | 0 | 0 | 4 | 40 | 60 | 100 | 2 | Major |
| 4 | BIL67119 | Design and Analysis of Algorithm | 2 | 0 | 4 | 40 | 60 | 100 | 4 | Major |
| 5 | BIL68120 | Project - II | 0 | 0 | 0 | 40 | 60 | 100 | 4 | Major |
| 6 | BIL67208 | Full Stack Development | 2 | 0 | 4 | 40 | 60 | 100 | 4 | Minor |
| TOTAL | | | 10 | 0 | 12 | 240 | 360 | 600 | 20 | |



BRAINWARE UNIVERSITY
School of Computational & Applied Sciences
Department of Computational Sciences
Bachelor of Computer Applications in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours) in Artificial Intelligence & Machine Learning/
Bachelor of Computer Applications (Honours with Research) in Artificial Intelligence & Machine Learning- 2026

SEMESTER – VII

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|-----------------------------|-----------|----------|----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL70121 | Research Methodologies | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Major |
| 2 | BIL70122 | Software Engineering | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Major |
| 3 | BIL77123 | Image Processing | 3 | 0 | 2 | 40 | 60 | 100 | 4 | Major |
| 4 | BIL77124 | Natural Language Processing | 3 | 0 | 2 | 40 | 60 | 100 | 4 | Major |
| 5 | BIL70209 | Optimization Techniques | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Minor |
| TOTAL | | | 15 | 3 | 4 | 200 | 300 | 500 | 20 | |

SEMESTER – VIII (Honours)

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|---------------------|-----------|----------|----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL87125H | Computer Vision | 3 | 0 | 2 | 40 | 60 | 100 | 4 | Major |
| 2 | BIL87126H | Pattern Recognition | 3 | 0 | 2 | 40 | 60 | 100 | 4 | Major |
| 3 | BIL87127H | Soft Computing | 3 | 0 | 2 | 40 | 60 | 100 | 4 | Major |
| 4 | BIL88128H | Project | 0 | 0 | 0 | 40 | 60 | 100 | 4 | Major |
| 5 | BIL80210H | Cloud Computing | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Minor |
| TOTAL | | | 12 | 1 | 6 | 200 | 300 | 500 | 20 | |

SEMESTER – VIII (HONOURS with RESEARCH)

| Sl. No. | Course Code | Course | L | T | P | Evaluation Scheme | | Total | Credits | Course Type |
|--------------|-------------|------------------|----------|----------|----------|-------------------|------------|------------|-----------|-------------|
| | | | | | | CIA | ESE | | | |
| 1 | BIL87125R | Generative AI | 2 | 0 | 4 | 40 | 60 | 100 | 4 | Major |
| 2 | BIL80210R | Agentic AI | 3 | 1 | 0 | 40 | 60 | 100 | 4 | Minor |
| 3 | BIL88001R | Research Project | 0 | 0 | 0 | 40 | 60 | 100 | 12 | RPC |
| TOTAL | | | 5 | 1 | 4 | 120 | 180 | 300 | 20 | |