

Department of Computer Science and Engineering
BTech CSE with Minor Specialization in AIML / FSD / MLDA
Sixth and Seventh Semester Scheme

AIML – Artificial Intelligence and Machine Learning

Sixth Semester					
Group	Paper Code	Paper	L	P	Credits
Theory Papers					
HS/MS	MS-302	Principles of Management for Engineers	3		3
HS	HS-304	Universal Human Values*	1		1
PCE-1	CIE-306T	Advanced Java Programming	3		3
	CIE-306P	Advanced Java Programming Lab		2	1
PCE-2	CIE-332T	Programming in Python	3		3
	CIE-332P	Programming in Python Lab		2	1
PCE-3	CIE-356T	Web Technologies	3		3
	CIE-356P	Web Technologies Lab		2	1
AIML-EAE-1	AI-302T	Artificial Intelligence	3		3
	AI-302P	Artificial Intelligence Lab		2	1
AIML-EAE-2	DA-304T	Statistics, Statistical Modelling & Data Analytics	3		3
	DA-304P	Statistics, Statistical Modelling & Data Analytics Lab		2	1
Practical / Viva Voce					
HS	ES-352	NSS / NCC / Cultural Clubs / Technical Society / Technical Club**			2
Total					26

***NUES:** All examinations to be conducted by the concerned teacher as specified in the detailed syllabus of the paper..

****NUES:** Comprehensive evaluation of the students by the concerned coordinator of NCC / NSS / Cultural Clubs / Technical Society / Technical Clubs, out of 100 as per the evaluation schemes worked out by these activity societies, organizations; the co-ordinators shall be responsible for the evaluation of the same. These activities shall start from the 1st semester and the evaluation shall be conducted at the end of the 6th semester for students admitted in the first semester. Students admitted in the 2nd year (3rd semester) as lateral entry shall be for the period of 3rd semester to 6th semester only.

Seventh Semester					
Group	Paper Code	Paper	L	P	Credits
Theory Papers					
HS/MS	MS-401	Principles of Entrepreneurship Mindset	2		2
PCE-4	CIE-405T	Data Science	3		3
	CIE-405P	Data Science Lab		2	1
PCE-5	CIE-425T	Data Warehousing and Data Mining	3		3
	CIE-425P	Data Warehousing and Data Mining Lab		2	1
AIML-EAE-3	ML-407T	Machine Learning	3		3
	ML-407P	Machine Learning Lab		2	1
AIML-EAE-4	ML-409T	Reinforcement Learning and Deep Learning	3		3
	ML-409P	Reinforcement Learning and Deep Learning Lab		2	1
AIML-EAE-5	ML-411T	Pattern Recognition and Computer Vision	3		3
	ML-411P	Pattern Recognition and Computer Vision Lab		2	1
Practical / Viva Voce					
PC / Project	ES-451	Minor Project**			3
PC / Internship	ES-453	Summer Training Report - 2 *			1
Total					26

***NUES:** Comprehensive evaluation of the Summer Training Report – 2 (after 6th Semester) shall be done by the committee of teachers, constituted by the Academic Programme Committee, out of 100. The training shall be of 4 to 6 weeks duration. The training can be under the mentorship of a teacher of the institute.

****The student shall be allocated a supervisor / guide for project work at the end 6th semester by the department / institution, the project shall continue into the 8th semester. In the 7th semester evaluation, the criteria for evaluation shall be conceptualization of the project work, the background study / literature survey and identification of objectives and methodology to be followed for project. 40 marks evaluation for the Teachers' Continuous Evaluation / Internal Assessment shall be done by concerned supervisor which the term end examination of 60 marks shall be conducted by the supervisor concerned and the external examiner deputed by the Examinations Division. In the absence of the supervisor, the Director of the Institution / Head of the Department can assign the responsibility of the supervisor (for purpose of examinations) to any faculty of the Institution / Department.**

FSD - Full Stack Development

Sixth Semester					
Group	Paper Code	Paper	L	P	Credits
Theory Papers					
HS/MS	MS-302	Principles of Management for Engineers	3		3
HS	HS-304	Universal Human Values*	1		1
PCE-1	CIE-320	Principles of Programming Languages	4		4
PCE-2	CIE-332T	Programming in Python	3		3
	CIE-332P	Programming in Python Lab		2	1
PCE-3	CIE-374T	Artificial Intelligence	3		3
	CIE-374P	Artificial Intelligence Lab		2	1
FSD-EAE-1	FSD-318T	Advanced Java Programming	3		3
	FSD-318P	Advanced Java Programming Lab		2	1
FSD-EAE-2	FSD-322T	Web Development using MERN Stack	3		3
	FSD-322P	Web Development using MERN Stack Lab		2	1
Practical / Viva Voce					
HS	ES-352	NSS / NCC / Cultural Clubs / Technical Society / Technical Club**			2
Total					26

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Seventh Semester					
Group	Paper Code	Paper	L	P	Credits
Theory Papers					
HS/MS	MS-401	Principles of Entrepreneurship Mindset	2		2
PCE-4	CIE-405T	Data Science	3		3
	CIE-405P	Data Science Lab		2	1
PCE-5	CIE-421T	Machine Learning	3		3
	CIE-421P	Machine Learning Lab		2	1
FSD-EAE-3	FSD-435T	PHP Programming and MySQL	3		3
	FSD-435P	PHP Programming and MySQL Lab		2	1
FSD-EAE-4	FSD-437T	Mobile App Development	3		3
	FSD-437P	Mobile App Development Lab		2	1
FSD-EAE-5	FSD-439T	Web and Mobile Application Testing and Deployment	3		3
	FSD-43P	Web and Mobile Application Testing and Deployment Lab		2	1
Practical / Viva Voce					
PC / Project	ES-451	Minor Project**			3
PC / Internship	ES-453	Summer Training Report - 2 *			1
Total					26

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MLDA - Machine Learning & Data Analytics

Sixth Semester					
Group	Paper Code	Paper	L	P	Credits
Theory Papers					
HS/MS	MS-302	Principles of Management for Engineers	3		3
HS	HS-304	Universal Human Values*	1		1
PCE-1	CIE-306T	Advanced Java Programming	3		3
	CIE-306P	Advanced Java Programming Lab		2	1
PCE-2	CIE-332T	Programming in Python	3		3
	CIE-332P	Programming in Python Lab		2	1
PCE-3	CIE-374T	Artificial Intelligence	3		3
	CIE-374P	Artificial Intelligence Lab		2	1
MLDA-EAE-1	DA-304T	Statistics, Statistical Modelling & Data Analytics	3		3
	DA-304P	Statistics, Statistical Modelling & Data Analytics Lab		2	1
MLDA-EAE-2	ML-342T	Machine Learning	3		3
	ML-342P	Machine Learning Lab		2	1
Practical / Viva Voce					
HS	ES-352	NSS / NCC / Cultural Clubs / Technical Society / Technical Club**			2
Total					26

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Seventh Semester					
Group	Paper Code	Paper	L	P	Credits
Theory Papers					
HS/MS	MS-401	Principles of Entrepreneurship Mindset	2		2
PCE-4	CIE-405T	Data Science	3		3
	CIE-405P	Data Science Lab		2	1
PCE-5	CIE-425T	Data Warehousing and Data Mining	3		3
	CIE-425P	Data Warehousing and Data Mining Lab		2	1
MLDA-EAE-3	ML-463T	Supervised and Deep Learning	3		3
	ML-463P	Supervised and Deep Learning Lab		2	1
MLDA-EAE-4	ML-465T	Unsupervised Learning	3		3
	ML-465P	Unsupervised Learning Lab		2	1
MLDA-EAE-5	ML-469T	Machine Learning and Data Analytics Frameworks	3		3
	ML-469P	Machine Learning and Data Analytics Frameworks Lab		2	1
Practical / Viva Voce					
PC / Project	ES-451	Minor Project**			3
PC / Internship	ES-453	Summer Training Report - 2 *			1
Total					26

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Gupta

Prof Namita Gupta

HoD CSE