



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (CS-IT) Sem-I from AY 2020-21

Sr.No.	Category	Course Code	Course Name	L	T	P	Hrs	Credits	ISE-1	MSE*	ISE-2	ESE
Professional Core (Theory)												
1	HS	4IC501	Research Methodology	2	0	0	2	2	10	30	10	50
2	PC	4IT501	Advanced Algorithms	3	0	0	3	3	10	30	10	50
3	PC	4IT502	Unix Internals	3	0	0	3	3	10	30	10	50
4	PC	4IT503	Cryptology	3	0	0	3	3	10	30	10	50
Professional Core (Lab)												
5	PC	4IT552	Unix Internals Lab	0	0	2	2	1	25	25	25	25
Professional Elective (Theory)												
6	PE	Refer list	Professional Elective 1	3	0	0	3	3	10	30	10	50
7	PE	Refer list	Professional Elective 2	3	0	0	3	3	10	30	10	50
Mandatory Life Skill Courses												
8	MC	Refer list	Mandatory Life Skill Course	2	0	0	2	0	10	30	10	50
Value Added Professional Courses #												
9	VAPC	Refer list	Value Added Professional Courses					#				
Value Added Life-Skill Courses #												
10	VALS	Refer list	Value Added Life Skill Courses					#				
Total				17	0	2	19	18				

Notes:

- * For Lab courses, there will be only internal continuous assessment. ESE is a separate head of passing for both theory and lab courses.
- # The Value Added Courses are Optional Courses. The mode of teaching (LTPI) & evaluation scheme is decided by the resource person.
The list of Value added courses will be updated from time to time.
The course may be on paid basis. The credits earned from these courses will be shown on grade card.
For SPI and CPI calculation, these courses will be excluded.
- @ Minimum 2 mandatory life skill courses are to be completed for award of degree.
For further details refer to Academic and Examination rules and regulations.



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Sr.No.	Course Code	Course Name
Professional Elective 1		
1	4IT511	Artificial Intelligence
2	4IT512	Machine Learning
3	4IT513	Distributed Operating Systems
4	4IT514	Decision Support Systems
Professional Elective 2		
1	4IT516	Software Reliability and Fault Detection
2	4IT517	Wireless Sensor Network
3	4IT518	Cloud and Virtualization Techniques
4	4IT519	Information Retrieval



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Credit System for F.Y. M.Tech. (CS-IT) Sem-II from AY 2020-21

Sr.No.	Category	Course Code	Course Name	L	T	P	Hrs	Credits	ISE-1	MSE*	ISE-2	ESE
Professional Core (Theory)												
1	PC	4IT521	Data Mining Methods and Applications	3	0	0	3	3	10	30	10	50
2	PC	4IT522	Image Processing and Pattern Recognition	3	0	0	3	3	10	30	10	50
3	PC	4IT523	Scientific Computing	1	0	0	1	1	10	30	10	50
Professional Core (Lab)												
4	PC	4IT571	Data Mining Methods Lab	0	0	2	2	1	25	25	25	25
5	PC	4IT572	Image Processing and Pattern Recognition Lab	0	0	2	2	1	25	25	25	25
6	PC	4IT573	Scientific Computing Lab	0	0	2	2	1	25	25	25	25
7	PC	4IT574	Industrial Project	0	0	4	4	2	25	25	25	25
Professional Elective (Theory)												
5	PE	Refer list	Professional Elective 3	3	0	0	3	3	10	30	10	50
6	PE	Refer list	Professional Elective 4	3	0	0	3	3	10	30	10	50
Mandatory Life Skill Courses												
8	MC	Refer list	Mandatory Life Skill Course	2	0	0	2	0	10	30	10	50
Value Added Professional Courses #												
9	VAPC	Refer list	Value Added Professional Courses					#				
Value Added Life-Skill Courses #												
10	VALS	Refer list	Value Added Life Skill Courses					#				
Total				13	0	10	23	18				

Notes:

* For Lab courses, there will be only internal continuous assessment. ESE is a separate head of passing for both theory and lab courses.

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Course List for F.Y. M.Tech. (CS-IT) Sem-II AY 2020-21

Sr.No.	Course Code	Course Name
Professional Elective 3		
1	4IT531	Deep Learning
2	4IT532	Real Time Operating Systems
3	4IT533	High Performance Computing
4	4IT534	Big Data Analysis
Professional Elective 4		
1	4IT536	Database Design and Performance Tuning
2	4IT537	Software Defined Network
3	4IT538	Computer Network and Forensics
4	4IT539	Data Warehousing