Kolhapur Institute of Technology's College of Engineering, Kolhapur

(An Autonomous Institute)



Proposed Curriculum Structure

for

Computer Science & Engineering (Under Graduate Programme)

Academic Year 2019-2020



Second Year B. Tech. Program in Computer Science & Engineering Semester-III

Course		٦	Геасһ	ing Sc	heme	Evaluation Scheme (TH)			
Code	Course	L	Р	Т	Credits	Components	Max	Min pass	
						ISE-I	10		
UCSE0301	Computational	,		4	4	ISE-II	10		40
UCSE0301	Mathematics	3	-	1	4	MSE	30		40
						ESE	50	20	
						ISE-I	10		
UCSE0302	Discrete Mathematical	3	_	1	4	ISE-II	10		40
0C3E0302	Structure)	-	1	4	MSE	30		40
						ESE	50	20	
						ISE-I	10		
UCSE0303	Data Structures	3	0		3	ISE-II	10		40
UCSEU3U3	Data Structures	s 3 0 -	-	3	MSE	30		40	
						ESE	50	20	
				ISE-I	10				
UCSE0304	Digital Logic Design &	4			4	ISE-II	10		40
UCSEU3U4	Microprocessors	4	-	-	4	MSE	30		40
						ESE	50	20	
						ISE-I	10		
UCSE0305	Data Communication and	3			3	ISE-II	10		40
UCSEU3U5	Networks	3	-	-	3	MSE	30		40
						ESE	50	20	
UCSE0331	Digital Logic Design &	_	2	_	1	ISE	25	10	-
00350331	Microprocessors Lab	_	2	_	1	ESE(OE)	50	20	-
UCSE0332	Data Communication and	_	2	_	1	ISE	25	10	-
0C3E0332	Networks Lab	_	2	-	1	ESE(POE)	50	20	-
UCSE0333	Data Structures Lab		4	Δ -	2	ISE	50	20	-
00320333	Data Structures Lab		7		2	ESE(POE)	50	20	-
UCSE0361	Environmental Studies	2	-	-	-	ESE	100	40	-
		18	8	2	22	1	850	-	-
			Total	Credi	ts: 22	Total Co	ntact h	ours:28	}

BS	Basic Sciences	L	Theory	ISE	In Semester Evaluation
ES	Engineering Sciences	Р	Practical	MSE	Mid Semester Examination
PC	Professional Core	Т	Tutorial	ESE	End Semester Examination



Second Year B. Tech. Program in Computer Science & Engineering Semester-IV

Course		_ 1	Геаchі	ng Sc	heme	Evaluation Scheme (TH)			
Code	Course	L	Р	Т	Credits	Components	Max	Min pass	
						ISE-I	10		
116650404	A . I I . Th			_	4	ISE-II	10		40
UCSE0401	Automata Theory	3	-	1	4	MSE	30		40
						ESE	50	20	
						ISE-I	10		
116650403	Canana tan Cuanhias				2	ISE-II	10		40
UCSE0402	Computer Graphics	3	-	-	3	MSE	30		40
						ESE	50	20	
						ISE-I	10		
						ISE-II	10		
UCSE0403	Computer Networks	3	-	-	3	MSE	30		40
					ŀ	ESE	50	20	
						ISE-I	10		
	Computer					ISE-II	10		40
UCSE0404	Organization and	3	-	-	3	MSE	30		
	Architecture					ESE	50	20	
						ISE-I	10		
					3	ISE-II	10		
UCSE0405	Software Engineering	3	-	-		MSE	30		40
						ESE	50	20	
	Object Oriented					ISE	25	10	
UCSE0431	Programming using C++ Lab	2	2	-	3	ESE(POE)	50	20	-
116650422	Computer Graphics		_		1	ISE	25	10	
UCSE0432	Lab	-	2	-	1	ESE(OE)	25	10	-
110050422	Computer Networks		_		4	ISE	25	10	
UCSE0433	Lab	-	2	-	1	ESE(OE)	25	10	-
LICCEOAE1	Mini Duniant		_		1	ISE	25	10	-
UCSE0451	Mini Project	-	2	_	1	ESE(POE)	50	20	-
UCSE0461	Soft Skills		2			ESE	50	20	
		17	10	1	22	-	800	-	-
		-	Total C	Credit	ts: 22	Total Contact hours:28			

BS	Basic Sciences	L	Theory	ISE	In Semester Evaluation
ES	Engineering Sciences	Р	Practical	MSE	Mid Semester Examination
PC	Professional Core	Т	Tutorial	ESE	End Semester Examination



Third Year B. Tech. Program in Computer Science & Engineering Semester-V

Cauraa		Т	eachin	ıg Sch	eme	Eva	aluation Sc	Evaluation Scheme (TH)				
Course Code	Course	L	Р	Т	Credits	Compone nts	Max	Min for	pass (%)			
						ISE-I	10					
LICCEOFO1	Company to a Alconithum	3		1	4	ISE-II	10		40			
UCSE0501	Computer Algorithm	3	-	1	4	MSE	30					
						ESE	50	20				
						ISE-I	10					
LICCEOFOS	One wating Coates	2			,	ISE-II	10		40			
UCSE0502	Operating System	3	-	-	3	MSE	30		40			
						ESE	50	20				
						ISE-I	10					
11005053*	Duefeesienel Fleeting I	2			_	ISE-II	10		40			
UCSE052*	Professional Elective-I	3	-	-	3	MSE	30		40			
						ESE	50	20				
						ISE-I	10					
LICCEOFOS	Databasa Fusing avius	2			,	ISE-II	10		40			
UCSE0503	Database Engineering	3	-	-	3	MSE	30		40			
						ESE	50	20				
						ISE-I	10					
116650504	Marshin Landin	2		1	_	ISE-II	10		40			
UCSE0504	Machine Learning	2	-	1	3	MSE	30		40			
						ESE	50	20				
LICCEOF 24	Database Engineering		_		1	ISE	25	10	10			
UCSE0531	Lab	-	2	-	1	ESE(POE)	50	20	25			
UCSE0532	Advanced Programming	2	4		4	ISE	25	10	10			
UCSEUS32	Lab	2	4	-	4	ESE (POE)	50	20	20			
UCSE0533	Operating System Lab	1	2	-	1	ISE	50	20	-			
UCSE056*	Professional Certification	-	2	-	-	ESE	100	40	-			
		16	10	2	22	-	800	-	-			
		T	otal C	redits	5: 22	То	tal Contac	t hours:28				

Professional Elective-1	Professional Certification
Mobile Technology (UCSE0521)	Data Structures, Algorithms using Python by NPTEL(UCSE0561)
Programming Paradigm (UCSE0522)	Google Cloud Computing by NPTEL (UCSE0562)
Project Management (UCSE0523)	Ultimate Google Cloud Certifications: All in one bundle by Udemy(UCSE0563)



Third Year B. Tech. Program in Computer Science & Engineering Semester-VI

Course		Te	eachi	ng S	cheme	Evaluatio	n Sche	me (TH)		
Code	Course	L	Р	Т	Credits	Components	Max	Min pass			
						ISE-I	10	-			
UCSE0601	Liniu On a matin a Cuata m	3			3	ISE-II	10		40		
0C3E0001	Unix Operating System	3	-	-	5	MSE	30		40		
						ESE	50	20			
						ISE-I	10				
UCSE0602	Compiler Construction	3		1	4	ISE-II	10		40		
0C3E0602	Compiler Construction	3	-	1	4	MSE	30		40		
						ESE	50	20			
						ISE-I	10				
UCSE0603	Information System	3		_	3	ISE-II	10		40		
0C3E0003	Security)	-	-		MSE	30		40		
						ESE	50	20			
						ISE-I	10				
UCSE062*	Professional Elective-II	3		_	3	ISE-II	10		40		
0C3E062	Professional Elective-II	3 -	-	-	3	MSE	30		40		
						ESE	50	20			
						ISE-I	10				
UOEL061*	Open Elective-l	3	_			_	3	ISE-II	10		40
OOLLOOI	Open Liective-i)	_	_	3	MSE	30		40		
						ESE	50	20			
UCSE0631	Information System	_	2	_	1	ISE	25	10	-		
00310031	Security Lab		2		1	ESE (OE)	50	20	ı		
UCSE063*	Professional Elective-II Lab	1	2	1	1	ISE	25	10	-		
0032003	FTOTESSIONAL ELECTIVE-II LAD		2		1	ESE(OE)	50	20	-		
UCSE0632	Univ Operating System Lab	-	2	1	1	ISE	25	10	-		
0C3E0032	Unix Operating System Lab		2	-	1	ESE(POE)	50	20	ı		
UCSE0651	Project Development	2	2		3	ISE	25	10	-		
00320031	Using Advanced Tools			_	<u> </u>	ESE(POE)	50	20	-		
UCSE0661	Professional Communication		2			ESE	100	40			
		17	10	1	22	-	900	-	-		
		Т	Total Credits: 22			Total Co	ntact h	ours:28			

PE-II Course Name	OE-I Course Name
Software Testing and Quality Assurance (UCSE0621)	Cyber Security (UOEL0611)
Software Testing and Quality Assurance Lab (UCSE0633)	Joy of Computing (UOEL0612)
Data Analytics (UCSE0622)	
Data Analytics Lab (UCSE0634)	
Ad-hoc Wireless Networks (UCSE0623)	

Ad-hoc Wireless Networks Lab (UCSE0635)



Final Year B. Tech. Program in Computer Science & Engineering Semester-VII

		Te	eachin	g Sche	eme	Evalua	tion Sche	me (TH)		
Course Code	Course	,	Р	Т	Credi	Compone	Max	Min	for	
		L	Ρ	ı	ts	nts	IVIAX	pass	s (%)	
						ISE-I	10			
UCSE0701	Distributed Systems	3	_		3	ISE-II	10		40	
00320701	Distributed Systems					MSE	30		40	
						ESE	50	20		
						ISE-I	10			
UCSE0702	Advanced Database	3			3	ISE-II	10		40	
00320702	Systems	3	_	_	3	MSE	30		40	
						ESE	50	20		
					3	ISE-I	10			
UCSE072*	Professional Elective-III	3		_		ISE-II	10		40	
OC3L072	FTOTESSIONAL LIECTIVE-III	3				MSE	30			
						ESE	50	20		
						ISE-I	10			
						ISE-II	10			
UOEL071*	Open Elective-II	3	-	-	3	MSE	30		40	
						ESE	50	20		
UCSE0731	Advanced Database		2	_	1	ISE	50	20		
00350731	Systems Lab	-	2	-	_	ESE(POE)	50	20		
UCSE0732	Web Technology Lab	3	4	-	5	ISE	50	20	-	
UC3E0732	Web rechilology Lab	3	4	•	ر	ESE(POE)	50	20	-	
UCSE0733	Distributed Systems Lab	_	2	_	1	ISE	50	20	-	
UC3EU/33	Distributed Systems Lab	-		1	1	ESE(OE)	50	20	-	
UCSE0751	Project Phase - I	-	2		1	ISE	50	20	-	
UCSE0761	Business English Communication	-	2	-	-	ESE	50	20	-	
		15	12	0	20	-	800	-	-	
		Т	otal Cr	edits	: 20	Total	Contact h	ours:27		

PE-III Course Name	OE-II Course Name				
Natural Language Processing (UCSE0721)	Basics of Network Engineering (UOEL0711)				
High Performance Computing (UCSE0722)	Software Systems (UOEL0712)				
Software Defined Network (UCSE0723)					
Digital Image Processing (LICSE0724)					



Final Year B. Tech. Program in Computer Science & Engineering Semester-VIII

Course		Te	eachir	ng Sch	eme	Evalu	ation Sche	me (TH)	
Code	Course	L	Р	Т	Credi ts	Compone nts	Max	Min fo	r pass
						ISE-I	10		
		2			2	ISE-II	10		40
	Internet of Things	2			2	MSE	30		40
UCSE0801						ESE	50	20	
						ISE-I	10		
		,			3	ISE-II	10		40
		3	3		3	MSE	30		40
UCSE0802	Cloud Computing					ESE	50	20	
UCSE0831	Internet of Things Lab		2		1	ISE	50	20	
						ISE-I	75	60	
UCSE0851	Project Phase - II	-	12	-	6	ISE-II	75	60	120
						ESE(POE)	150	60	
		5	14	0	12	0	400	-	-
	•	Т	otal C	redits	: 12	Tota	Contact h	ours:19	

PC Professional Core PRJ. Project L Theory

ISE

In Semester Evaluation

P Practical MSE T Tutorial ESE

Distribution of Credits:-

Domain	Credits	Percentage
Project (PRJ)	11	6.4%
Humanities Science (HS)	6	3.53%
Basic Science (BS)	18	10.59%
Engineering Science (ES)	26	15.29%
Professional Core (PC)	93	53.53%
Professional Elective (PE)	10	5.88%
Open Elective (OE)	6	3.53%
Total	170	100.00%

