## ACADEMIC CURRICULA

Project Work, Seminar,

Internship in Industry / Higher Technical Institutions

Courses

Regulations 2018

**Volume - 4 (8)** 



SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

Kattankulathur, Kancheepuram, Tamil Nadu, India

Course	18ASP101L 18CHP101L	18ASP104L 18CHP104L	18AUP101L 18CEP101L	18AUP104L 18CEP104L	18BTP101L 18CSP101L	18BTP104L 18CSP104L	Course	MASSIVE OPEN ONLINE COURSE - I	Course	D	Project Work, Seminar, Internship in Industry /	L	T	Р	С
Code	18EEP101L 18MHP101L	18EEP104L 18MHP104L	18ECP101L 18NTP101L	18ECP104L 18NTP104L	18MEP101L	18MEP104L	Name	MASSIVE OPEN ONLINE COURSE - II	Category	Г	Higher Technical Institutions	0	0	2	1

Course Learning Rationale (CLR): The purpose of learning this course is to:	L	.earni	ng					Prog	ıram L	_earni	ing Οι	utcome	es (PL	LO)			
CLR-1: Improve Student Academic Characteristics and learning goals through forums, discussion groups, and blogs	1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CLR-2 : Improve Student Personal Characteristics through self-learning habits			100				Ч			ity							
CLR-3: Characterize self-learning environment that includes pedagogy, tools, tasks, duration, feedback and assessments	E	(%)	(%)	0			arch			abil		~					
CLR-4: Improve lifelong learning habits and Learning process	(Bloom)			g		eut	ese			ain		Work		<u>e</u>			
CLR-5 : Characterize learning engagement methods and activities	8	Proficiency	Attainment	Knowledge	"	md	R	sage	45	Sustainability				Finance	ing		
CLR-6: Inculcate self-learning behavior and lifelong learning tendency	is	ficie	i i	j.	ysis	<u>e</u>	ign	Use	ulture	& S		eam	5	⊗ E	Ē		
Course Learning Outcomes (CLO): At the end of this course, learners will be able to:	Level of Thinking	Expected Pro	Expected Atta	Engineering l	Problem Analys	Design & Development	Analysis, Desig <mark>n,</mark>	Modern Tool	Society & Cu	Environment	Ethics	Individual & T	nicat	Project Mgt. 8	Life Long Lea	PSO - 1	PS0-2
CLO-1: Inculcate student characteristics: prior-knowledge, prior-experience, expertise, academic achievement and matriculation	3	95	85	Н	М	М	Н	Н	Н	-	Н	Н	Н	-	Н	-	-
CLO-2: Inculcate self-motivation, self-confidence, intrinsic motivation, participation, social economic statute, and task-orientation	3	95	85	Н	М	M	Н	Н	Н	-	Н	Н	Н	-	Н	-	-
CLO-3: Enhance self-learning through peer learning, learning groups, positive collaboration	3	95	85	Н	М	М	Н	Н	Н	-	Н	Н	Н	-	Н	-	-
CLO-4: Explore different learning styles and activities, identify self-learning pace, difficulties and remedial measures	3	95	85	Н	М	М	Н	Н	Н	-	Н	Н	Н	-	Н	-	-
CLO-5: Identify ways of students' engagement, achievement, and attrition	3	95	85	Н	М	М	Н	Н	Н	-	Н	Н	Н	-	Н	-	-
CLO-6: Identify ethical practices in self-learning and practice both individual and group learning dynamics	3	95	85	Н	М	М	Н	Н	Н	-	Н	Н	Н	-	Н	-	-

MOOC Course Selection: List of MOOC Courses that are Approved to be learned by the student in the respective semester will be displayed by the Department MOOC Committee. Student can pick any course from that list.

Learning Assessment	
MOOC Certification Obtained (80% weightage)	Final Presentation (20% weightage)

Note: Final Presentation by the student would be evaluated by the Department MOOC Committee.

		18ECP105L 18NTP105L	18CSP102L 18MEP102L	18CSP105L 18MEP105L	Course Name	INDUSTRIAL	TRAIN	ING -	(	Course Category	Р	Proje		gher					ndustr	y/	0	0	P 2
Course Learning Rationale (CLR): The	purpose of lear	rning this <mark>cours</mark>	se is to:	77-1	116	NO	L	earnin	ng					Progi	ram L	.earni	ng Ou	utcom	es (Pl	LO)			
CLR-1: Train oneself in finding the aspe	ects in real-time	work environm	<mark>nent an</mark> d prepar	e them to join th	e workforce	in the future	1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CLR-2: Gain Exposure to the actual wor	rking conditions	incl <mark>uding rules</mark>	s, regulations a	nd safety practic	es											£							
CLR-3: Enhance and supplement the kr	nowledge and si	kil <mark>ls of the st</mark> uc	dents				<u>-</u>	(0		F)			arch			i							
CLR-4: Develop the students in terms o	of ability, compet	<mark>tence and</mark> inter	rpersonal relation	onship			(Bloom)	(%)	(%)	ge		it .	Research			Sustainability		Work		9			
CLR-5: Enhance students' knowledge ir	n one partic <mark>ular</mark>	technology	- 1				<u>@</u>	ncy	ent	Nec Nec		Jue		ge		nste		>		inance	D		
CLR-6: Provide learning platform that ca	an enhanc <mark>e thei</mark>	<mark>ir emp</mark> loy abilit	y skills			**********	ing	icie	in	Jo	/sis	ole	gn,	Jsa	nre	ઝ જ		Team	<u>_</u>	ш	earning	PSO-1	
Course Learning Outcomes (CLO): At t	the en <mark>d of this</mark> c	course. learner	s will be able to	- 4/5			Level of Thinking (	Expected Proficiency	Expected Attainment	Engineering Knowledge	Problem Analysis	Design & Developme <mark>nt</mark>	Analysis, Design,	Modern Tool Usage	Society & Culture	Environment 8	Ethics	ndividual & T	Communication	Project Mgt. &	ong L	1	PSO - 2
, ,									ũ				¥			ь ,		_	ŏ			2	<u>~</u>
CLO-1: Apply knowledge of Mathematic						war and the same	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	-
CLO-2: Demonstrate competency in rele						lution	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	-
CLO-3: Effectively implement skills in pr					edia tools	No.256 and 1	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	-
CLO-4: Develop ability to work as an inc		0 1		nember			3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	-
CLO-5: Master the professional and eth				12/2/201	770 1 7		3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	-
CLO-6: Generate a report based on the	ex <mark>perience</mark> s an	nd projects carr	ried out in a rea	l-world work env	vironment		3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	-

Learning Assessment	
Industrial Training Certification Obtained (80% weightage)	Final Presentation (20% weightage)

Note: Final Presentation Evaluation would be done by the Internship/Industrial Training Committee formed by the Department.

Course	18ASP103L 18CHP103L	18ASP106L 18CHP106L	18AUP103L 18CEP103L	18AUP106L 18CEP106L	18BTP103L 18CSP103L	18BTP106L 18CSP106L	Course	SEMIN	IAR –			Course	P	Proje	ct Woı						dustry	,, L	. T	ī F	Р	С
Code	18EEP103L 18MHP103L	18EEP106L 18MHP106L	18ECP103L 18NTP103L	18ECP106L 18NTP106L	18MEP103L	18MEP106L	Name	SEMIN	AR –	II	C	ategory	·		Hig	gher 1	Techni	ical In	nstitut	ions		(	0	) 2	2	1
								The Prince																		
Course Le	earning Rational	e (CLR):	ne purpose of le	arning this <mark>cour</mark>	se is to:	_ [		NU	L	.earnii	ng					Progr	am Le	earnir	ng Ou	tcome	es (PL	.O)				
CLR-1:					<mark>d a</mark> bility to prese				1	2	3	1	2	3	4	5	6	7	8	9	10	11 1	2 1	3 1	14	15
CLR-2: CLR-3: CLR-4: CLR-5: CLR-6:	Create an envil	ronment that he ain some specit appropriate note I thinking, inforr	elps the student fic skills, compe e-taking, test-ta mation literacy,	establish health tencies, and pol king, and time-r Interdisciplinary	ny relationships ints of view nanagement str	- 15	works cademic stud		evel of Thinking (Bloom)	Expected Proficiency (%)	Expected Attainment (%)	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	呈	Environment & Sustainability	Ethics	ndividual & Team Work	.음	ect Mg1	ō	1	1	-50-3
CLO-1:	Gaining factual	l knowledge (tei	rminol <mark>ogy, clas</mark> s	sifications, meth	ods, trends)		- 1	G10 C7 C	3	95	85	H	М	М	H	Н	Н	L	H	H	Н	- 7	H		-	-
CLO-2:	Rlate to their in	nterests, abilities	s, ca <mark>reer choic</mark> e	s, <mark>and</mark> personal	development	Autor Control		W. W.	3	95	85	Н	М	М	_H	Н	Н	L	Н	Н	Н	- 1	Н	-	-	-
CLO-3:	Develop a plan	that demonstra	ates <mark>their resp</mark> oi	nsibility for their	own education		77,477	Notice /	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	- 1	H .	-	-	-
CLO-4:					n in improving a	cademic life	1000		3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	- 1	H .	-	-	-
CLO-5:	Describe the be	ehaviors and ch	nara <mark>cteristics</mark> of	an effective lea	rner				3	95	85	H	M	M	Н	Н	Н	L	Н	Н	Н	- 1	H .	-	-	-

Seminar Selection: List of Seminar Topics that are Approved to be learned by the student in the respective semester will be displayed by the Department Seminar Selection/Evaluation Committee. Student can pick any topic from that list.

3 95 85

Learning Assessment		The second	7/3_
Seminar Pre	paration Materials & Report (80% weightage)		Final Presentation (20% weightage)

Note: Final Presentation Evaluation would be done by the Seminar Evaluation Committee formed by the Department.

CLO-6: Improve the Presentation Skills, Discussion Skills, Listening Skills, Argumentative Skills, Critical Thinking, Questioning

Course         18ASP107L         18AUP107L         18BTP107L         18CHP107L         18CEP107L         18CSP107L         Course Name           Code         18EEP107L         18ECP107L         18MEP107L         18MHP107L         18NTP107L         Name         Name	PROJE	ECT		Course Category	Р	Proje				ar, Inte nical li		p in In tions	dustry		L T	P 6	
Course Learning Rationale (CLR): The purpose of learning this course is to:	ī	_earni	ng					Prog	gram L	_earni	ng Ou	utcome	es (PL	.O)			
CLR-1: Learn responsible and professional way of working	1	2	3	1	2	3	4	5	6	7	8	9	10	11 ′	12   13	3 14	4 15
CLR-2: Practice development-oriented approach to work							<u>_</u>			lity							
CLR-3: Enhance students' knowledge in one particular technology	(Bloom)	(%	(%)	Ф			Research			Sustainability		*					
CLR-4: Create awareness of the social, cultural, global and environmental responsibility as an engineer	<u></u>	Proficiency (%)	) t	b	`	Development	ese			tain		Work		Finance			
CLR-5: Grow more empathetic, become systems thinkers, become explorers, problem-solvers.	(H)	enc	Attainment	Ne Ne	S	pp	R,	age	Φ	sns		E		<u> </u>	DD		
CLR-6: Learn project management.	E	Jei	aji	Ş	lysi	l le	igi	Os	Culture			Team	ы Б	∞ ⊏ .	earning		
	Thinking	Pro	Att	2	Analysis		Design,	00	S	ent		య	cat	g:			
	of T	ted	ted	eri.	E	∞	is,	T L	⊗ >	шu		na	<u> </u>	Ž	ong -	- 6	ر س
Course Learning Outcomes (CLO): At the end of this course, learners will be able to:	Level	Expected	Expected	Engineering Knowledge	Problem	Design	Analysi <mark>s,</mark>	Modern Tool Usage	Society	Environment &	Ethics	Individual	Communication	Project Mgt.	Life Lo	000	PSO-
CLO-1: Develop capability to acquire and apply fundamental principles of engineering	3	95	85	Н	М	М	Ĥ	Н	Ĥ	L	Н	Н	Н	Н	Н -	-	
CLO-2: Become updated with all the latest changes in technological world	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н -	-	
CLO-3: Make deep connections between ideas	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н -	-	
CLO-4: Learn to take creative risks	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н -	-	
CLO-5: Be ready for the creative economy also engage in iterative thinking and divergent thinking	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н -	-	
CLO-6: Identify, formulate and model problems and find engineering solution based on a systems approach	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н -	-	
		10				100											
Project Work Selection: Project Work Titles for students would be finalized by the Department Project Work Evaluation Committee.	30																
	14.																
Learning Assessment	-	7	4	-31		-											
MOOC Certification Obtained (80% weightage)									(20%								

Course         18ASP108L         18AUP108L         18BTP108L         18CHP108L         18CEP108L         18CSP108L         Course Name           Code         18EEP108L         18ECP108L         18MEP108L         18MHP108L         18NTP108L         Name         INTER	NSHIF	P	(	Course Category	Р	Proje					ernship Instituti		dustry	/ L	T 0	P 6	C 3
Course Learning Rationale (CLR): The purpose of learning this course is to:	L	.earnii	Ū					Prog	gram L	Learni	ing Out	1	,	O)			
CLR-1: Understanding of industry/organization customs and practices	1	2	3	1	2	3	4	5	6	7	8	9	10 1	1 1	2   13	14	15
CLR-2: Demonstrate professional skills that pertain directly to the internship experience CLR-3: Demonstrate effective verbal and written communication skills, Allocate time effectively CLR-4: 1. Demonstrate effective listening skills CLR-5: 2. Participate well as a team member and build professional network CLR-6: Build a record of work experience, Develop work habits and attitudes necessary for job success	of Thinking (Bloom)	ted Proficiency (%)	sted Attainment (%)	Engineering Knowledge	em Analysis	n & Development	sis <mark>, Design, Resea</mark> rch	rn Tool Usage	ty & Culture	Environment & Sustainability		ndividual & Team Work	유니요	ත –	olig Lealinig	-2	-3
Course Learning Outcomes (CLO): At the end of this course, learners will be able to:	Level	Expected	Expected	Engin	Problem	Design	Analysis <mark>, I</mark>	Modern	Society	Envir	Ethics	Individ	Comr	Project Hife I		PSO	PSO
CLO-1: 3. Adapt effectively to changing conditions	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	H I	1 -	-	-
CLO-2: 4. Demonstrate appropriate workplace attitudes	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	H	H F	1 -	-	-
CLO-3: Demonstrate individual responsibility	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	H I	1 -	-	-
CLO-4: Demonstrate effective management of personal behavior, ethics and attitudes	3	95	85	Н	М	M	Н	Н	Н	L	Н	Н	H	H F	1 -	-	-
CLO-5: Practice ethical standards appropriate to the internship site	3	95	85	Н	M	M	Н	Н	Н	L	Н	Н	H	H F	1 -	-	-
CLO-6: Explore career alternatives prior to graduation, Integrate theory and practice	3	95	85	Н	М	М	Н	Н	Н	L	Н	Н	Н	H I	1 -	-	-

Internship Training Selection: List of Industries / Research Centre's for Internship Training for students would be finalized by the Department Internship/Industrial Training Committee.

Learning Assessment		
Ir	nternship Certification Obtained (80% weightage)	Final Presentation (20% weightage)

Note: Final Presentation Evaluation would be done by the Internship/Industrial Training Committee formed by the Department.

Course         18ASP109L         18AUP109L         18BTP109L         18CHP109L         18CEP109L         18CSP109L         Course Name           Code         18EEP109L         18ECP109L         18MEP109L         18MHP109L         18NTP109L         Name	PROJECT Course Category P Project Work, Seminar, Internship in Industry / L T P Higher Technical Institutions 0 0 20	
Course Learning Rationale (CLR): The purpose of learning this course is to:	Learning Program Learning Outcomes (PLO)	
CLR-1 : Learn responsible and professional way of working	1 2 3 1 2 3 4 5 6 7 8 9 10 11 12 13 14	4 15
CLR-2: Practice development-oriented approach to work	g <u>\$</u>	
CLR-3: Enhance students' knowledge in one particular technology	(%) (%) (%) om) ut	
CLR-4: Create awareness of the social, cultural, global and environmental responsibility as an engineer	hinking (Bloom) Proficiency (%) Attainment (%)  Attainment (%)  Nalysis Development  Design, Research  Culture ant & Sustainability  & Team Work  ation  Learning	
CLR-5: Grow more empathetic, become systems thinkers, become explorers, problem-solvers.	hinking (Blo Proficiency Attainment Attainment og Knowled vnalysis Developme Culture ant & Sustai St Team W Cation  Gation  Learning	
CLR-6: Learn project management.	Attainmen Attainmen Attainmen By Knowle By Knowle By Knowle By Knowle By Culture By Team A Team A Team A Team A Team By Team B	
	Expected Proficiency (%)  Expected Attainment (%)  Expected Attainment (%)  Engineering Knowledge  Problem Analysis  Design & Development  Analysis, Design, Resear  Modern Tool Usage  Society & Culture  Environment & Sustainab  Ethics  Individual & Team Work  Communication  Project Mgt. & Finance  Life Long Learning  PSO - 1	4 က
Course Learning Outcomes (CLO): At the end of this course, learners will be able to:	Expected In Expected Expected Expected Expected Expected Modern Topolom & Individual Communic Project Mg Proje	PSO -
CLO-1: Develop capability to acquire and apply fundamental principles of engineering	3 95 85 H M M H H H L H H H H H	-
CLO-2: Become updated with all the latest changes in technological world	3 95 85 <u>H M M H H H L H H H H H</u>	-
CLO-3: Make deep connections between ideas	3 95 85 H M M H H H L H H H H H	-
CLO-4: Learn to take creative risks	3 95 85 H M M H H H L H H H H	-
CLO-5: Be ready for the creative economy also engage in iterative thinking and divergent thinking	3 95 85 H M M H H H L H H H H	-
CLO-6: Identify, formulate and model problems and find engineering solution based on a systems approach	3 95 85 H M M H H H L H H H H	-
Project Work Selection: Project Work Titles for students would be finalized by the Department Project Work Evaluation Comm	tee.	

Final Presentation (20% weightage)

Learning Assessment

Course         18ASP110L         18AUP110L         18BTP110L         18CEP110L         18CSP110L         Course Name           Code         18EEP110L         18ECP110L         18MEP110L         18MHP110L         18NTP110L         18CSP110L         Course Name         Name	TER INTE	RNSH	IP	Cour Categ		Р	Proje					ternsh Institu			ry/	L 0	T 0	P C 20 10
Course Learning Rationale (CLR): The purpose of learning this course is to:		Learni	ng						Prog	ıram l	Learn	ning O	utcon	nes (P	PLO)			
CLR-1: Become job ready along with real corporate exposure	1	2	3		1	2	3	4	5	6	7	8	9	10	11	12	13	14 1
CLR-2: Increase self-confidence and helps in finding their own proficiency								ť			lity							
CLR-3: Cultivate leadership ability and responsibility to perform or execute the given task	(Bloom)	(%	(%		Ф		Į,	Research			Sustainability		¥					
CLR-4: Inculcate learners hands on practice within a real job situation	0	×	± (		edg		en	ese	-		tai.		۷o		92			
CLR-5: Create awareness of the social, cultural, global and environmental responsibility as an engineer	(B)	Proficiency (%)	Attainment (%)	<i>P</i>	wle	S	ndo	α,	age	Ф	Sns		Team Work		Finance	ng		
CLR-6: Become able to identify, formulate and model problems and find engineering solution based on a systems approach	king	Je je	aj.		\ \	lysi	)e	igi	Usi	Culture	∞		ea	G	∞ ⊥	earning		
LORON.	of Thinking	sted Pro	sted Att		Engineering Knowledge	Problem Analysis	n & Development	sis, Design,	Modern Tool Usage	∞ŏ	invironment		ndividual & 7	Communication	Mgt.	ong Lea	<del>-</del>	2 - 5
Course Learning Outcomes (CLO): At the end of this course, learners will be able to:	Level	Expected	Expected	٦.	Engin	Proble	Design	Analysis,	Mode	Society	Envir	Ethics	Indivi	Comr	Project	Life L	PS0	PSO
CLO-1: Enhance capability to acquire and apply fundamental principles of engineering	3	95	85		Н	M	M	H	Н	H	L	Н	Н	Н	Н	H	-	
CLO-2: Become master in one's specialized technology	3	95	85		H	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	
CLO-3: Become updated with all the latest changes in technological world	3	95	85		Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	
	2	95	85		Н	М	М	Н	Н	Н	1	Н	Н	Н	Н	Н	-	
CLO-4: Demonstrate hands on practice within a real job situation	3	90	00															
CLO-4: Demonstrate hands on practice within a real job situation CLO-5: Inculcate self-improvement through continuous professional development and life-long learning	3	95	85		Н	М	М	Н	Н	Н	L	Н	Н	Н	Н	Н	-	

Internship Training Selection: List of Industries / Research Centre's for Internship Training for students would be finalized by the Department Internship/Industrial Training Committee.

Learning Assessment
Internship Certification Obtained (80% weightage)
Final Presentation (20% weightage)

Note: Final Presentation Evaluation would be done by the Internship/Industrial Training Committee formed by the Department.



## SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

Kattankulathur, Kancheepuram District-603203, Tamil Nadu, India