

1.	AEROSPACE ENGINEERING	<b>MINOR</b>		Template No. <b>AE-5</b>	
		<b>Title</b>	AEROSPACE ENGINEERING		
		<b>C O U R S E S</b>	AE201A [05]		
			Any <b>THREE</b> from:		
			AE211A [11]		
			AE321A [09]		
			AE331A [09]		
			AE650A [09]/AE753A [09]/AE341 [11]		
32-36					

2.	BIOLOGICAL SCIENCES AND BIO-ENGINEERING	<b>MINOR</b>		Template No. <b>BSBE-5</b>	
		<b>Title</b>	TISSUE ENGINEERING		
		<b>C O U R S E S</b>	BSE211A [09]		
			BSE411A [11]		
			BSE421A [11]		
			-		
31					

3.	CHEMICAL ENGINEERING	<b>MINOR</b>		Template No. <b>CHE-5</b>	
		<b>Title</b>	CHEMICAL ENGINEERING		
		<b>C O U R S E S</b>	CHE251A [09]		
			CHE261A [09]		
			CHE313A [09]		
			CHE331A [09]		
-					
36					

<b>4.</b>	<b>CHEMISTRY</b>	<b>MINOR</b>		<b>Template No. CHM-5</b>	
		<b>Title</b>	<b>PHYSICAL CHEMISTRY*</b>	<b>INORGANIC CHEMISTRY</b>	<b>ORGANIC CHEMISTRY</b>
		<b>C</b>	CHM321A [09]	CHM345A [09]	CHM201A [09]**
			CHM322A [09]	CHM342A [09]	CHM202A [09]
		<b>O</b>	Any <b>TWO</b> from:	Any <b>TWO</b> from:	CHM303A [09]
					CHM402A [09]
		<b>U</b> <b>R</b> <b>S</b> <b>E</b> <b>S</b>	CHM621A [09]	CHM616A [09]	-
			CHM622A [09]	CHM631A [09]	
CHM626A [09]	CHM646A [09]				
CHM636A [09]	CHM647A [09]				
CHM637A [09]	CHM651A [09]				
CHM650A [09]	CHM654A [09]				
CHM664A [09]	CHM668A [09]				
CHM685A [09]	CHM691A [09]				
CHM689A [09]					
CHM695A [09]					
CHM696A [09]					
CHM699A [09]					
	<b>36</b>	<b>36</b>	<b>36</b>		
<b>REMARKS:</b>					
1) *CSO202A is a pre-requisite for Minor in Physical Chemistry					
2) **EXCEPTION: CHM201A to be done by Y13 and onward batches. Y11 and Y12 batch shall do CHM203A. Course title, content and credits are same. Just the course number has been changed.					

5.	CIVIL ENGINEERING	<b>MINOR</b>		Template No. <b>CE-5</b>
		<b>Title</b>	<b>EARTH SCIENCES</b>	<b>INFRASTRUCTURE ENGINEERING AND MANAGEMENT * #</b>
		C O U R S E S	CE322A [09]	CE241 [09] [odd semester]
			CE422A [09]	CE640 [06] [odd semester]
			CE642A [09]	CE641A [05] [odd semester] [Modular]
				CE643A [05] or CE644A [05] [even semester] [Modular]
			CE667A [05] [even semester] [Modular]	
27	* all odd semester courses to be done before even semester courses			
	Item No. 29 2015-16/8 <sup>th</sup> (23 & 24.05.2016) and letter date 26.07.2016			

6.	COMPUTER SCIENCE & ENGINEERING	<b>MINOR</b>			Template No. <b>CSE-4</b>	
		<b>Title</b>	<b>ALGORITHMS</b>	<b>COMPUTER SYSTEMS</b>	<b>THEORY OF COMPUTING</b>	<b>ARTIFICIAL INTELLIGENCE</b>
		C	CS210A [12] / ESO207A [09]	CS210A [12] / ESO207A [09]	CS210A [12] / ESO207A [09]	CS210A [12] / ESO207A [09]
			CS345A [09]	Any <b>TWO</b> from:	CS340A [09]	CS365A [09]
		Any <b>ONE</b> from:	Any <b>ONE</b> from:		Any <b>ONE</b> from:	
		U	CS645A [09]	CS220A [12]	CS640A [09]	CS671A [09]
		R	CS646A [09]	CS330A [12]	CS641A [09]	CS672A [09]
		S	CS647A [09]	CS315A [09]	CS642A [09]	CS674A [09]
		E	CS648A [09]	CS335A [12]	CS643A [09]	CS675A [09]
		S	CS663A [09]	CS422A [09]	CS644A [09]	CS676A [09]
	CS664A [09]	CS425A [09]	CS649A [09]	CS685A [09]		
	CS719A [09]	CS433A [09]	CS680A [09]	CS686A [09]		
	CS743A [09]	CS455A [09]	CS681A [09]	CS782A [09]		
			CS687A [09]			
			CS740A [09]			
			CS741A [09]			
			CS742A [09]			
<b>REMARKS:</b>						
1) For each Minor stream, the minimum total credit requirement is 27.						
2) In each minor stream any related course(s), even if not mentioned in the list of optional courses, may be taken as optional with the permission of the CSE DUGC.						

7.	ELECTRICAL ENGINEERING	<b>MINOR</b>			Template No.EE-4		
		<b>Title</b>	<b>MICROELECTRONICS/ DIGITAL SYSTEMS</b>	<b>POWER</b>	<b>COMMUNICATIONS &amp; SIGNAL PROCESSING</b>	<b>CONTROLS</b>	<b>RF &amp; PHOTONICS</b>
		<b>C O U R S E S</b>	EE200A [11]	EE200A [11]	EE200A [11]	EE200A [11]	EE200A [11]
			EE210A [11]	EE330A [11]	EE320A [11]	EE250A [11]	EE340A [11]
			EE311A [09]/ EE370A [11]	EE360A [09]	EE321A [09]/ EE301A [09]	EE650A [09]	EE612A [09]/ EE642A [09]/ EE648A [09]
	31/33	31	31	31	31		

8.	HUMANITIES & SOCIAL SCIENCES	<b>MINOR</b>		Template No. HSS-1	
		<b>Title</b>	<b>LINGUISTIC THEORY</b>	<b>ENGLISH LITERATURE</b>	
		<b>C O U R S E S</b>	ENG122A [11] / ENG124 [11]	Students need to do any THREE courses from the following list:	
			Any TWO from:	ENG123 [11]	
				ENG431 [09]	
ENG432 [09]					
ENG433 [09]					
ENG434 [09]					
ENG435 [09]					
ENG436 [09]					
ENG408 [09]	ENG437 [09]				
ENG423 [09]	ENG438 [09]				
ENG443 [09]	ENG439 [09]				
ENG447 [09]	ENG440 [09]				
ENG448 [09]	ENG445 [09]				
ENG449 [09]	ENG446 [09]				
		ENG456 [09]			
		ENG457 [09]			
		ENG458 [09]			
		ENG460 [09]			
	29	27 / 29			
<p><b>Remarks:</b> If a student has done a course in English other than those listed above and wishes to have a Minor in English (Linguistics or English literature), s/he may request the DUGC of HSS dept. for approval of the same.</p>					

9.	INDUSTRIAL AND MANAGEMENT ENGINEERING	<b>MINOR</b>		Template No. <b>IME-3</b>	
		<b>Title</b>			
		C O U R S E S	DE PG-1		
			DE PG-2		
			DE PG-3		
			-		
			<b>27</b>		
<b>REMARKS:</b>					
1) DE PG may be from IME or MBA courses.					

10.	MATERIALS SCIENCE & ENGINEERING	<b>MINOR</b>		Template No. <b>MSE-5</b>	
		<b>Title</b>	FUNCTIONAL MATERIALS		
		C O U R S E S	Any <b>THREE</b> from:		
			MSE604A [09]		
			MSE624A [09]		
			MSE628A [09]		
			MSE631A [09]		
	MSE693A [09]				
	<b>27</b>				

11.	MATHEMATICS AND SCIENTIFIC COMPUTING	<b>MINOR</b>		Template No. <b>BS-MTH-5</b>	
		<b>Title</b>	APPLIED MATHEMATICS		
		C O U R S E S	MTH308A [11]		
			MTH428A [11]		
			MTH426A [09]		
			-		
			<b>31</b>		

<b>12.</b>	<b>MECHANICAL ENGINEERING</b>	<b>MINOR</b>		<b>Template No. ME-5</b>	
		<b>Title</b>	<b>MANUFACTURING SCIENCES</b>	<b>COMPUTATIONAL TECHNIQUES IN MECHANICAL ENGINEERING</b>	
		<b>C O U R S E S</b>	Any <b>THREE</b> from:		Any <b>THREE</b> from:
			<b>ME661A [09]</b> (Prerequisite TA202A)		<b>ME623A [09]</b> (Prerequisite ESO202A, MSO203B)
			<b>ME662A [09]</b> (Prerequisite TA202A)		<b>ME630A [09]</b> (Prerequisite ESO201A, ESO204A, MSO203B)
			<b>ME663A [09]</b> (Prerequisite ESO202A, MSO203B)		<b>ME685A [09]</b> (Prerequisite – No backlog in core courses)
			<b>ME664A [09]</b> (Prerequisite TA202A, ESO204A or Equivalent Heat Transfer Course)		<b>ME751A [09]</b> (Prerequisite TA101A)
			<b>ME665A [09]</b> (Prerequisite TA202A)		<b>MEXXXA [09]</b> (Nonlinear Finite Element Techniques in Solid Mechanics)
			<b>ME774A [09]</b> (Prerequisite ESO202A, MSO203B)		<b>MEXXXA [09]</b> (Atomistic Simulations in Engineering)
			<b>ME751A [09]</b> (Prerequisite TA101A)		-
			<b>ME761A [09]</b> (Prerequisite TA202A)		
			<b>27</b>		<b>27</b>

<b>13.</b>	<b>NUCLEAR ENGINEERING &amp; TECHNOLOGY</b>	<b>MINOR</b>		<b>Template No. BS-NET 2</b>	
		<b>Title</b>	<b>NUCLEAR ENGINEERING &amp; TECHNOLOGY</b>		
		<b>C O U R S E S</b>	<b>NT602A [09]</b>		
			<b>NT611A [09]</b>		
			<b>NT614A [09]</b>		
				-	
<b>27</b>					

14.	PHYSICS	<b>MINOR</b>		Template No. <b>BS-PHY-5</b>
		<b>Title</b>	<b>STATISTICAL MECHANICS</b>	<b>QUANTUM MECHANICS</b>
		<b>C</b>		
		<b>O</b>	<b>PSO201A [08]</b>	<b>PSO201A [08]</b>
		<b>U</b>	<b>PHY210A [06]</b>	<b>PHY210A [06]</b>
		<b>R</b>	<b>PHY226B [06]</b>	<b>PHY226B [06]</b>
		<b>S</b>	<b>PHY412A [11]</b>	<b>PHY431A [11]</b>
		<b>31</b>	<b>31</b>	

The End