

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING**

**M. Tech. 1st Year 1<sup>st</sup> Semester**

**SESSION: 2021 - 2022**

DAY	Group	9.00 AM – 9.55 AM	9.55 AM – 10.50 AM	10.50 AM – 11.45 AM	11.45 AM – 12.25 PM	12.25 PM – 1.20 PM	1.20 PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05 PM – 5.00 PM	5.00 PM – 5.55 PM
MON	Gr1	Remedial	AEIE5141 MC	AEIE5101 SG	BREAK						
	Gr2										
TUE	Gr1	Remedial	AEIE5102 DC	AEIE5102 DC		AEIE5103 SMC	AEIE5133 DMG	AEIE5133 DMG			
	Gr2										
WED	Gr1	Remedial	AEIE5101 SG	AEIE5141 MC							
	Gr2										
THU	Gr1	Remedial	AEIE5101 SG	AEIE5102 DC		AEIE5133 DMG	AEIE5103 SMC				
	Gr2										
FRI	Gr1	Remedial	DIMA5116 SR				AEIE5141 MC				
	Gr2										

To be Effective from 1<sup>st</sup> December 2021

A minimum of 75% attendance is mandatory for being eligible to sit for the End-Semester Examination.

Students should target 100% attendance

**Member**

**HOD**

**Principal**

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING**

**M. Tech. 1st Year 1<sup>st</sup> Semester**

**SESSION: 2021-2022**

INITIAL	FULLNAME	DEPARTMENT
MC	Dr. Madhurima Chattopadhyay	Applied Electronics & Instrumentation Engineering
SG	Dr. Santanu Ghorai	
DMG	Damayanti Ghosh	
DC	Debjyoti Chowdhury	
SJD	Sujoy Kr. Das	
SMP	Sampa Maity (Paul)	
SR	Dr. Siuli Roy	Information Technology

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING**

M. Tech. 1st Year 1<sup>st</sup> Semester

SESSION: 2021-2022

**Course Structure**

**1<sup>st</sup> Year 1<sup>st</sup> Semester Syllabus:**

Course Type	Course Code	Course Name	Contact Hrs Per Week				Credit Points
			L	T	P	Total	
Core 1	AEIE5101	Advanced Digital Signals and Systems	3	0	0	3	3
Core 2	AEIE5102	Programming Language for Embedded IOT Systems	3	0	0	3	3
	AEIE5103	Research Methodology and IPR	2	0	0	2	2
Prog. Specific Elective	AEIE5131/	<b>Elective-I</b> (1) Micro-Electronic Devices and Circuits	3	0	0	3	3
	AEIE5132/	(2) Medical Instrumentation					
	AEIE5133	(3) Instrumentation and Industrial Automation					
Prog. Specific Elective	AEIE5141/	<b>Elective-II</b> (1) Mechatronics	3	0	0	3	3
	AEIE5142/	(2) Advanced Digital Control System					
	AEIE5143	(3) Advanced Optical Instrumentation					
LAB	AEIE5151	Digital Signal Processing LAB	0	0	4	4	2
	AEIE5152	Programming Language LAB	0	0	4	4	2
Aud 1* - Any one subject from the course list	DIMA5116	Disaster Management	2	0	0	2	0
	INCO5117	Constitution of India					
	PDLS5118	Personality Development through Life Enlightenment Skills					
	YOGA5119	Stress Management by Yoga					
	SANS5120	Sanskrit for Technical Knowledge					
<b>Total</b>			<b>16</b>	<b>0</b>	<b>8</b>	<b>24</b>	<b>18</b>

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING**

**M. Tech. 2nd Year 1st Semester**

**SESSION: 2021-2022**

DAY	9.00 AM – 9.55 AM	9.55 AM – 10.50 AM	10.50 AM – 11.45 AM	11.45 AM – 12.25 PM	12.25 PM – 1.20 PM	1.20 PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05 PM – 5.00 PM	5.00 PM – 5.55 PM
MON	Remedial	L/ AEIE6121 SJB		B R E A K						
TUE	Remedial	L/ AEIE6134/ SG								
WED										
THU		L/ AEIE6121 SJB								
FRI	Library		L/ AEIE6134/ SG/ICT 109							

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING**

**M. Tech. 2nd Year 1st Semester**

**SESSION: 2021-2022**

<b>INITIAL</b>	<b>FULLNAME</b>	<b>DEPARTMENT</b>
SG	Dr. Santanu Ghorai	Applied Electronics & Instrumentation Engineering
SJB	Dr. Surajit Bagchi	

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING**

**M. Tech. 2nd Year 1st Semester**

**SESSION: 2021-2022**

**2nd Year 1st Semester Syllabus:**

Course Type	Course Code	Course Name	Contact Hrs Per Week				Credit Points
			L	T	P	Total	
<b>Prog. Specific Elective</b>	AEIE6131/ AEIE6132/ AEIE6133 <b>AEIE6134</b>	<b>Elective-V</b> (1) Micro-Electromechanical System Design (2) VLSI Technology (3) Robotics Engineering (4) <b>Remote Sensing</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>
<b>Open Elective*</b> (Any one subject from the course list)	<b>AEIE6121/</b> AEIE6122/ CSEN6121/ CSEN6122/ MATH6121	<b>Elective-VI</b> (1) <b>Biosignal and Biomedical Image Processing</b> (2) Intelligent Control (3) Business Analytics (4) Advanced Artificial Intelligence (5) Optimization Techniques	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>
<b>Major Project</b>	AEIE6195	Dissertation Phase I	<b>0</b>	<b>0</b>	<b>20</b>	<b>20</b>	<b>10</b>
		Total	<b>6</b>	<b>0</b>	<b>20</b>	<b>26</b>	<b>16</b>

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH VLSI**

**SESSION: 2021-2022**

**2<sup>nd</sup> YEAR, 1<sup>st</sup> SEMESTER**

DAY	9.00 AM – 9.55AM	9.55 AM – 10.50 AM	10.50 NOON – 11.45 PM	11.45AM- 12.25PM	12.25 PM – 1.20PM	1.20PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05PM- 5.00PM	5.00PM- 5.55PM
MON				Break						
TUE						L/VLSI 6132/KM	L/VLSI 6132/KM			
WED			L/VLSI 6132/AMB							
THU					L/ECEN 6125/SM					
FRI	L/ECEN 6125/SM	L/ECEN 6125/SM								

To be effective from 1<sup>st</sup> December, 2021  
A minimum of 75% attendance is mandatory for being eligible to sit for the End-Semester Examination.  
Students should target 100% attendance

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH VLSI**

**SESSION: 2021-2022**

**2<sup>nd</sup> YEAR, 1<sup>st</sup> SEMESTER**

**FACULTY NAMES**

Faculty names	Initials	Department
Prof. Amrita Banerjee	AMB	ECE
Prof.(Dr.) Kasturi Mukherjee	KM	ECE
Prof.(Dr.) SusovanMandal	SM	ECE

**COURSE STRUCTURE**

To be effective from 1<sup>st</sup> December, 2021  
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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH VLSI**

**2<sup>nd</sup> YEAR, 1<sup>st</sup> SEMESTER**

**SESSION: 2021-2022**

**2<sup>nd</sup>. Year, Semester I**

A. Theory								
Sl. No.	Course Type	Code	Course Title	Contact Hours/Week				Credits
				L	T	P	Total	
1	Professional Elective PE-5	VLSI6131	Nano materials and Nano Technology	3	0	0	3	3
		VLSI6132	RF IC Design and MEMS					
2	Open Elective	MATH6121	Optimization Techniques	3	0	0	3	3
		CSEN6121	Business Analytics					
		ECEN 6125	Design and Technology for Photonic Integrated Circuit					
		AEIE6123	Intelligent Control					
Total of Theory				6	0	0	6	6
B. Sessional								
1	Dissertation	VLSI6195	Dissertation Phase I	0	0	20	20	10
Total of Semester				6	0	20	26	16

**OPEN ELECTIVES TO BE OFFERED BY ECE DEPARTMENT (3<sup>rd</sup>. Semester):**

OPEN ELECTIVES TO BE OFFERED BY ECE DEPARTMENT (5 <sup>th</sup> Semester):							
Open Elective	ECEN6121	Ad Hoc Networks and Uses	3	0	0	3	3
	ECEN6122	Embedded Systems					
	ECEN6123	Cognitive Radios					
	ECEN6124	Automation in VLSI Design					

To be effective from 1<sup>st</sup> December, 2021  
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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH ECE**

**SESSION: 2021-2022**

**2<sup>nd</sup> YEAR, 1<sup>st</sup> SEMESTER**

DAY	9.00 AM – 9.55AM	9:55 AM – 10.50 AM	10.50 NOON – 11.45 PM	11.45AM-12.25PM	12.25 PM – 1.20PM	1.20PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05PM-5.00PM	5.00PM-5.55PM
MON				Break						
TUE		<b>L/ECEN 6132/PRB</b>	<b>L/ECEN 6132/PRB</b>							
WED		L/ECEN 6132/PRB								
THU					<b>L/ECEN 6125/SM/ICT 509</b>					
FRI	L/ECEN 6125/SM/ICT 509	L/ECEN 6125/SM/ICT 509								

To be effective from 1<sup>st</sup> December, 2021  
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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH ECE**

**SESSION: 2021-2022**

**2<sup>nd</sup> YEAR, 1<sup>st</sup> SEMESTER**

**FACULTY NAMES**

Faculty names	Initials	Department
Prof. (Dr.) Prabir Banerjee	PRB	ECE
Prof.(Dr.) SusovanMandal	SM	ECE

To be effective from 1<sup>st</sup> December, 2021  
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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH ECE**

**2<sup>nd</sup> YEAR, 1<sup>st</sup> SEMESTER**

**SESSION: 2021-2022**

## **COURSE STRUCTURE**

**2<sup>nd</sup>, Year, Semester I**

A. Theory								
Sl No	Course Type	Code	Course Title	Contact Hrs/Week				Credits
				L	T	P	Total	
1	Professional Elective V (Prog. Specific Professional Elective)	ECEN6131	Remote Sensing and applications	3	0	0	3	3
		ECEN6132	Internet of Things (IoT) and applications					
		ECEN6133	MIMO Systems					
2	Open Elective	MATH6121	Optimization Techniques	3	0	0	3	3
		CSEN6121	Business Analytics					
		ECEN 6125	Design and Technology for Photonic Integrated Circuit					
		AEIE6123	Intelligent Control					
Total of Theory				6	0	0	6	6

<b>B. Sessional</b>								
1	Dissertation	ECEN6195	Dissertation Phase I	0	0	20	20	10
<b>Total of Semester</b>				<b>6</b>	<b>0</b>	<b>20</b>	<b>26</b>	<b>16</b>

To be effective from 1<sup>st</sup> December, 2021  
A minimum of 75% attendance is mandatory for being eligible to sit for the End-Semester Examination.  
Students should target 100% attendance  
HOD

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HERITAGE INSTITUTE OF TECHNOLOGY Department of Computer Science & Engineering TIME TABLE											
M. Tech 1st Sem										Session: 2021-2022	
MON	9.00 AM – 10.45 AM		11.00 AM – 12.45 PM		12.45 PM – 1.45 PM	1.45 PM – 3.30 PM		3.45 PM – 5.30 PM			
	LAB/ CSEN5181/DB/ICT-B12/SA				BREAK	LAB/CSEN5151/NGB/ICT-B12/SC					
	9.00 AM –9.50 AM	9.55 AM – 10.45 AM	10.50 AM – 11.40 AM	11:45 AM-12:25 PM	12.25 PM – 1.15 PM	1.20 PM – 2.10 PM	2.15 PM – 3.05 PM	3:10 PM -4:00PM	4.05 PM – 4.55 PM	5.00 PM – 5.50 PM	
TUE	L/CSEN5101/NGB		L/MATH5101 /VB	B R E A K	L/CSEN5131/DB						
WED	L/CSEN5102/MBK	Remedial	L/MATH5101 /SDS		L/CSEN5141/NB						
THU	L/CSEN5131/DB		Remedial		L/MATH5101 /MP		R/MATH5101 /MP				
FRI	L/CSEN5102/MBK	L/DIMA5116/SR	L/DIMA5116/SR		L/CSEN5101/NGB		L/CSEN5141/NB				
To be effective from 1st December, 2021 A minimum of 75% attendance is mandatory for being eligible to sit for the End Semester Examination Student should target 100% attendance.											
Member				HOD				Principal			

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**Department of Computer Science & Engineering**  
**TIME TABLE**

**M. Tech 1st Sem**

**Session: 2021-2022**

Faculty Name	Abbreviation	Department
Prof. Venu Bihani	VB	MATH
Prof. Sudipta Sarkar	SDS	MATH
Prof. Moumita Pramanik	MP	MATH
Prof. Dinabandhu Bhandari	DB	CSE
Prof. Nilanjana G Basu	NGB	CSE
Prof. Mohuya Byabartta Kar	MBK	CSE
Prof. Nilina Bera	NB	CSE
Prof Siuli Roy	SR	IT

T.A. Name	Abbreviation	Department
Mr. SURAJIT ACHARYA	SA	CSE
Mr. SUDIPTA CHAKRABARTY	SC	CSE

**A. Theory**

Sl.	Course Number	Subject	Scheme Of Studies Per Week			Total	Credits
			L	T	P		
1	CSEN5101	Advanced Data Structures	3	0	0	3	3
2	CSEN5102	Research Methodology and II	2	0	0	2	2
3	MATH5101	Advanced Discrete Mathemat and Statistical Methods	3	0	0	3	3
4	CSEN5131 – CSEN5140	Professional Elective I	3	0	0	3	3
	CSEN5131 CSEN5132 CSEN5133 CSEN5134 CSEN5135	Machine Learning Advanced Wireless and Mobi Introduction to Intelligent Sy GPU Computing Image Proc					
5	CSEN5141 – CSEN5150	Professional Elective II	3	0	0	3	3
	CSEN5141 CSEN5142 CSEN5143 CSEN5144 CSEN5145	Data Science Distributed Systems Wireless Sensor Networks Digital Forensics Computational Biology					
6	Audit Course DIMA5116 IN YOGA5119 SAN5120	Disaster Management Con Stress Management by Yo	2	0	0	2	0
<b>Total Theory</b>			<b>16</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>14</b>

**Practical**

1	CSEN5151	Advanced Data Structures Lab	0	0	4	4	2
2	CSEN5181 - CSEN5190	Professional Elective-I Lab	0	0	4	4	2
	CSEN5181 CSEN5182 CSEN5183 CSEN5184 CSEN5185	Machine Learning Lab Advanced Wireless and Mobile Networks Lab Introduction to Intelligent Systems Lab GPU Computing Lab Image Processing Lab					

<b>Total Practical</b>			<b>0</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>4</b>
<b>Total Semester</b>			<b>16</b>	<b>0</b>	<b>8</b>	<b>24</b>	<b>18</b>

HERITAGE INSTITUTE OF TECHNOLOGY Department of Computer Science & Engineering TIME TABLE										
M. Tech 3rd Sem								Session: 2021-2022		
DAY	9.00 AM – 9.50 AM	9.55 AM – 10.45 AM	10.50 AM – 11.40 AM	11.45 AM – 12.25 PM	12.25 PM – 1.15 PM	1.20 PM – 2.10 PM	2.15 PM – 3.05 PM	3.10 PM – 4.00 PM	4.05 PM – 4.55 PM	5.00 PM – 5.50 PM
MON		L/MATH6121/MS		B R E A K						
TUE		L/CSEN6137/AS								
WED	Project	Project	Project							
THU		L/CSEN6137/AS	R/CSEN6137/AS							
FRI					L/MATH6121/DC					
To be effective from 1st December, 2021 A minimum of 75% attendance is mandatory for being eligible to sit for the End Semester Examination Student should target 100% attendance.										
Member				HOD				Principal		

HERITAGE INSTITUTE OF TECHNOLOGY Department of Computer Science & Engineering TIME TABLE									
M. Tech 3rd Sem					Session: 2021-2022				
		Faculty Name	Abbreviation	Department					
		Prof. Moulipriya Sarkar	MS	MATH					
		Prof. Dr. Dipankar Chakraborty	DC	MATH					
		Prof. Aritra Saha	AS	CSE					
		A. Theory							
		Sl.	Course Number	Subject	Scheme Of Studies Per Week			Total	Credits
					L	T	P		
		1	CSEN6131 - CSEN6139	Professional Elective V	3	0	0	3	3
			CSEN6131 CSEN6132 CSEN6133 CS CSEN6138 CSEN6139	Mobile Applications and Services Compiler for HPC Computational Complexity Fault Tolerant Computing Approximation Algorithms Randomized Algorithms Information Retrieval Social Network Analysis Quantum Computing					
		2		Open Elective	3	0	0	3	3
			CSEN6121 ECEN6122 IN MATH6121 AEIE6122	Business Analytics Design of Embedded Systems Information Theory and Coding Automation in VLSI Design Optimization Techniques Intelligent Control					
		Total Theory			6	0	0	6	6
		B. Sessional							
		1	CSEN6195	Dissertation – Phase I	0	0	20	20	10
		Total Semester			6	0	20	26	16

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**

M. Tech. 2 year 1 <sup>st</sup> semester				DEPARTMENT OF BIOTECHNOLOGY				SESSION: 2021- 2022		
DAY	9.00AM- 9.50AM	9.55AM- 10.45AM	10.50AM- 11.40AM	11.45AM- 12.25AM	12.25PM- 1.15PM	1.20PM- 2.10PM	2.15PM- 3.05PM	3.10PM- 4.00PM	4.05PM- 4:55PM	5.00PM- 5.50PM
MON	BIOT6132 PC	BIOT6121 SB	BIOT6133 TKG	BREAK	BIOT6132 RG	BIOT6131 BC	BIOT6121 RG	PROJECT		
TUE	PROJECT		BIOT6133 TKG		BIOT6131 BC	BIOT6131 SDE	PROJECT			
WED	PROJECT		BIOT6121 SMB		BIOT6131 SDE	PROJECT				
THU	PROJECT		BIOT6133 TKG		BIOT6132 RC	PROJECT				
FRI	PROJECT	BIOT6133 TKG	BIOT6121 SMB		BIOT6132 RC	PROJECT				

**To be effective from 1<sup>st</sup> December, 2021**

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**

**M. Tech. 2 year 1<sup>st</sup> semester**

**DEPARTMENT OF BIOTECHNOLOGY**

**SESSION: 2021- 2022**

<b>Faculty Abbreviation</b>	<b>Name of the Faculty</b>	<b>Name of the Department</b>
SB	Prof. Srabanti Basu	Biotechnology
DC	Prof. Dipankar Chaudhuri	Biotechnology
NKJ	Prof. Nandan .Kumar Jana	Biotechnology
TKG	Prof. Tapan Kumar Ghosh	Biotechnology
KM	Prof. Kakali Mukherjee	Biotechnology
SMB	Prof. Soma Banerjee	Biotechnology
RG	Prof. Riddhi Goswami	Biotechnology
RC	Prof. Ruplekha Chatterjee	Biotechnology
SDE	Prof. Sudipta Dey Bandyopadhyay	Biotechnology
BC	Prof. Bhaswati Chakraborty	Biotechnology
SHD	Prof. Sonali Hazra Das	Biotechnology
PC	Prof.. Plaban Chaudhuri	Biotechnology
SB	Samarpita Bhattacharya	Maths

CB	Mr. Chayan Banerjee	Biotechnology
SM	Ms. Sharmistha Mukherjee	Biotechnology
CD	Ms. Chandralekha Dasgupta	Biotechnology
AM	Mr. Abhisek Mukherjee	Biotechnology
MB	Mainak Bhattacharya	Biotechnology
SS	Shubhasree Sengupta	Biotechnology
MS	Munmun Sen	Biotechnology

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**

**M. Tech. 2 year 1<sup>st</sup> semester**

**DEPARTMENT OF BIOTECHNOLOGY**

**SESSION: 2021- 2022**

**2<sup>nd</sup> yr 1<sup>st</sup> semester**

Course Code	Field	Course Title	Scheme of studies per week			Credits
			L	T	P	
<b>A</b>		<b>Theory</b>				
<b>BIOT6131</b>	Prof. Elective 5	Modelling and Simulation in Bioprocess	3	0	0	3
<b>BIOT6132</b>		Biopharmaceuticals				
<b>BIOT6133</b>		Downstream Processing				
<b>BIOT6121</b>	Open Elective*	Engineering Mathematics and Biostatistics	3	0	0	3
<b>AEIE6122</b>		Intelligent Control				
<b>CSEN6121</b>		Business Analytics				
<b>MATH6121</b>		Optimization Techniques				
<b>REEN6122</b>		Safety and Hazards in Energy Industry				
		<b>Total Theory</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>B</b>		<b>Sessional</b>				
<b>BIOT6195</b>	Project	Dissertation-I /Industrial Project	0	0	20	10
		<b>Total Sessional</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>10</b>
		<b>SEMESTER TOTAL</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>16</b>

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**

M. Tech. 1 year 1 <sup>ST</sup> semester				DEPARTMENT OF BIOTECHNOLOGY				SESSION: 2021- 2022		
DAY	9.00AM- 9.50AM	9.55AM- 10.45AM	10.50AM- 11.40AM	11.45AM- 12.25AM	12.25PM- 1.15PM	1.20PM- 2.10PM	2.15PM- 3.05PM	3.10PM- 4.00PM	4.05PM- 4:55PM	5.00PM- 5.50PM
MON	BIOT5131 RC	BIOT5102 DC	BIOT5141 SMB	BREAK	BIOT5142 BC	BIOT5101 NKJ				
					BIOT5141 RC					
TUE	BIOT5102 SB	BIOT5102 DC	BIOT5141 KM		BIOT5101 KM	REMEDIAL	BIOT5101 NKJ			
			BIOT5142 SB							
WED	BIOT 5103 PC	REMEDIAL	BIOT5142 SB		BIOT5103 RG					
THU	BIOT5131 KM	BIOT5102 SB	BIOT5131 SHD							
FRI	BIOT5142 BC	DIMA5116 SR			BIOT5101 NKJ	BIOT5131 SHD	BIOT5141 SMB			

**To be effective from 01.12.2021.**

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**

**M. Tech. 1 year 1<sup>ST</sup> semester**

**DEPARTMENT OF BIOTECHNOLOGY**

**SESSION: 2021- 2022**

<b>Faculty Abbreviation</b>	<b>Name of the Faculty</b>	<b>Name of the Department</b>
SB	Prof. Srabanti Basu	Biotechnology
DC	Prof. Dipankar Chaudhuri	Biotechnology
NKJ	Prof. Nandan .Kumar Jana	Biotechnology
TKG	Prof. Tapan Kumar Ghosh	Biotechnology
KM	Prof. Kakali Mukherjee	Biotechnology
SMB	Prof. Soma Banerjee	Biotechnology
RG	Prof. Riddhi Goswami	Biotechnology
RC	Prof. Ruplekha Chatterjee	Biotechnology
SDE	Prof. Sudipta Dey Bandyopadhyay	Biotechnology
BC	Prof. Bhaswati Chakraborty	Biotechnology
SHD	Prof. Sonali Hazra Das	Biotechnology
PC	Prof.. Plaban Chaudhuri	Biotechnology

<b>TA Abbreviation</b>	<b>Name of the TA</b>	<b>Name of the Department</b>
CB	Chayan Banerjee	Biotechnology
SM	Sharmistha Mukherjee	Biotechnology
CD	Chandralekha Dasgupta	Biotechnology
AM	Abhisek Mukherjee	Biotechnology
MB	Mainak Bhattacharya	Biotechnology
SS	Shubhasree Sengupta	Biotechnology
MS	Munmun Sen	Biotechnology

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**Member**

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**HOD**

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**Principal**

**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE

**M. Tech. 1 year 1<sup>ST</sup> semester**  
**1<sup>st</sup> yr 1<sup>st</sup> semester**

**DEPARTMENT OF BIOTECHNOLOGY**

**SESSION: 2021- 2022**

Code	Field	Course Title	Scheme of studies per week			Credits
			L	T	P	
<b>A</b>		<b>Theory</b>				
<b>BIOT5101</b>	Prof. Core	Advanced Genetic Engineering	3	0	0	3
<b>BIOT5102</b>	Prof. Core	Physicochemical Techniques in Biotechnology	3	0	0	3
<b>BIOT5103</b>		Research Methodology, Bioethics and IPR	2	0	0	2
<b>BIOT5131</b>	Prof. Elective 1	Advanced Enzyme Technology	3	0	0	3
<b>BIOT5132</b>		Nanotechnology				
<b>BIOT5141</b>	Prof. Elective 2	Agricultural Biotechnology	3	0	0	3
<b>BIOT5142</b>		Advanced Environmental Biotechnology				
<b>DIMA5116</b>	Audit Course-1	Disaster Management	2	0	0	0
<b>INCO5117</b>		Constitution of India				
<b>PDLS5118</b>		Personality Development through Life Enlightenment Skills				
<b>YOGA5119</b>		Stress Management by Yoga				
		<b>Total Theory</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>14</b>
<b>B</b>		<b>Practical</b>				
<b>BIOT5151</b>	Prof. Core	Advanced Genetic Engineering Lab	0	0	4	2
<b>BIOT5152</b>	Prof. Core	Physicochemical Techniques Lab	0	0	4	2
		<b>Total Practical</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>4</b>
		<b>SEMESTER TOTAL</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>18</b>

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH ECE**

**SESSION: 2021-2022**

**1<sup>st</sup> YEAR, 1<sup>st</sup> SEMESTER**

DAY	9.00 AM – 9.55AM	9.55 AM – 10.50 AM	10.50 NOON – 11.45 PM	11.45AM-12.25PM	12.25 PM – 1.20PM	1.20PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05PM-5.00PM	5.00PM-5.55PM
MON	<b>L/ECEN5101 /SC</b>	L/ECEN5102/AC	L/ECEN5102/AC	Break						
TUE	L/ECEN5101/SC	L/ECEN5131/AR	L/ECEN5131/AR		L/ECEN 5103/MK	L/ECEN 5103/MK				
WED	L/ECEN 5141/SB	L/ECEN 5141/SB								
THU	L/ECEN5102/AR	L/ECEN5101 /SC	<b>L/ECEN5131/PR B</b>							
FRI	L/ECEN 5141 /SB	L/DIMA5116/SR	<b>L/DIMA5116/SR</b>							

To be effective from the date of commencement of 1st December,2021  
A minimum of 75% attendance is mandatory for being eligible to sit for the End-Semester Examination.  
Students should target 100% attendance

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH ECE**

**SESSION: 2021-2022**

**1<sup>st</sup> YEAR, 1<sup>st</sup> SEMESTER**

**FACULTY NAMES**

Faculty names	Initials	Department
Prof. (Dr.) Prabir Banerjee	PRB	ECE
Prof. Arindam Ray	AR	ECE
Prof.(Dr.) SoumyoChatterjee	SC	ECE
Prof.(Dr.) MousikiKar	MK	ECE
Prof. AnanyaChattopadhyay	AC	ECE
Prof.(Dr.) Sriparna Bhattacharya	SB	ECE
Prof. (Dr.) Siuli Roy	SR	IT

**TA NAMES**

TA names	Initials	Department
Sushanta Mandal	SM	ECE

To be effective from the date of commencement of 1st December,2021  
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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH ECE**

SESSION: 2021-2022

1<sup>st</sup> YEAR, 1<sup>st</sup> SEMESTER

## COURSE STRUCTURE

1<sup>st</sup> Year, Semester I

A. Theory								
Sl No	Course Type	Code	Course Title	Contact Hrs/Week				Credits
				L	T	P	Total	
1	Professional Core 1	ECENS101	Antenna and Radiating Systems	3	0	0	3	3
2	Professional Core 2	ECENS102	Wireless and Mobile Communication	3	0	0	3	3
3	Professional Elective I (Prog. Specific Professional Elective)	ECENS131	Wireless Ad Hoc and Sensor Networks	3	0	0	3	3
		ECENS132	Photonics and Optical Communication Networks					
		ECENS133	Statistical Process in Communication.					
4	Professional Elective II (Prog. Specific Professional Elective)	ECENS141	Satellite Communication and applications	3	0	0	3	3
		ECENS142	Multimedia Communication					
		ECENS143	Cryptography and Network Security					
5	Mgt. Group	ECENS103	Research Methodology and IPR	2	0	0	2	2
6	Audit 1	DIMAS116	Disaster Management	2	0	0	2	0
		INCOS117	Constitution of India					
		PDLSS118	Personality Development					
		YOGAS119	Stress Management by Yoga					
		SANSK120	Sanskrit for Technical Knowledge					
Total Theory				16	0	0	16	14

B. Practical								
1	Professional lab1	ECENS151	Antenna and Radiating Systems lab	0	0	4	4	2
2	Professional lab2	ECENS152	Wireless and Mobile Communication lab	0	0	4	4	2
Total Practical				0	0	8	8	4
Total for Semester				16	0	8	24	18

To be effective from the date of commencement of 1st December,2021  
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**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF CHEMICAL ENGINEERING**

**M.Tech. (Renewable Energy) 2nd year 1<sup>st</sup> Semester**

**Session 2021– 2022**

DAY	9.00 AM – 9.55 AM	9.55 AM – 10.50 AM	10.50 AM – 11.45 AM	11.45 AM – 12.25 PM	12.25PM – 1.20 PM	1.20PM – 2.15 PM	2.15 PM – 3.10 PM	3.10PM – 4.05 PM	4.05 PM – 5 PM	5 PM – 5.55 PM
MON			L/REEN 6143/SWV/							
TUE										
WED							L/REEN 6122/PB	L/REEN 6122/PB		
THU										
FRI	L/REEN 6143/SWV	L/REEN 6143/SWV					L/REEN 6122/PB			

**Routine will be effective from 1<sup>st</sup> December, 2021.**

A minimum of 75% attendance is mandatory for being eligible to sit for the Semester Examination.

Students should target 100% attendance

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF CHEMICAL ENGINEERING**

**M.Tech. (Renewable Energy) 2nd year 1<sup>st</sup> Semester**

**Session 2021– 2022**

<b>2<sup>nd</sup> Year 1<sup>st</sup> Semester (Semester 3)</b>							
<b>THEORY</b>							
<b>Sl. No</b>	<b>Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>H</b>	<b>Credit</b>
01	REEN 6141-6143	Professional Elective V	3	0	0	3	3
02	REEN 6121	Composite Materials	3	0	0	3	3
	REEN 6122	Safety and Hazards in Energy Industry					
	BIOT 6121	Engineering Mathematics and Biostatistics					
	CSEN 6121	Business Analytics					
<b>Total Theory</b>							<b>6</b>
<b>LABORATORY/SESSIONAL</b>							
<b>Sl. No</b>	<b>Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>H</b>	<b>Credit</b>
01	REEN 6195	Dissertation / Industrial Project – Phase I	0	0	2 0	2 0	1 0
<b>Total Practical</b>							<b>10</b>
<b>Semester Total</b>							<b>16</b>

<b>Professional Elective V</b>	<b>REEN 6141</b>	<b>REEN 6142</b>	<b>REEN 6143</b>
<b>Subject name</b>	Energy Management	Renewable Energy Policy and Regulation	Environment Impact Assessment

<b>Open Elective – I</b>	
<b>REEN 6121</b>	Composite Materials
<b>REEN 6122</b>	Safety and Hazards in Energy Industry
<b>BIOT 6121</b>	Engineering Mathematics and Biostatistics
<b>CSEN 6121</b>	Business Analytics

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF CHEMICAL ENGINEERING**

**M.Tech. (Renewable Energy) 2nd year 1<sup>st</sup> Semester**

**Session 2021– 2022**

INITIAL	FULLNAME	DEPARTMENT
SWV	Prof. Swami Vedajnananda	Chemical Engineering
PB	Prof. Pinaki Bhattacharya	Chemical Engineering

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF CHEMICAL ENGINEERING**

**M.Tech. (Renewable Energy) 1st year 1<sup>st</sup> Semester**

**Session 2021– 2022**

DAY	9.00 AM – 9.55 AM	9.55 AM – 10.50 AM	10.50 AM – 11.45 AM	11.45 AM – 12.25 PM	12.25 PM – 1.20 PM	1.20 PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05 PM – 5 PM	5 PM – 5.55 PM
MON										
TUE	L/REEN 5101/PS	L/REEN 5103/ SWV/	REEN 5103/ SWV/	BREAK	L/REEN 5144/DD/	L/REEN 5144/DD/	L/REEN 5102/SKS	L/REEN 5141/CR		
WED	L/REEN 5102/DS	L/REEN 5102/DS	L/REEN 5101/ARS/	BREAK						
THU				BREAK	L/REEN 5141/CR/	L/REEN 5141/CR/	L/REEN 5144/SM			
FRI	L/REEN 5101/ARS	L/DIMA 5116/SR		BREAK	L/REEN 5144/SM					

**Routine will be effective from 1<sup>st</sup> December, 2021**

A minimum of 75% attendance is mandatory for being eligible to sit for the Semester Examination.

Students should target 100% attendance

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF CHEMICAL ENGINEERING**

**M.Tech. (Renewable Energy) 1st year 1<sup>st</sup>Semester**

**Session 2021– 2022**

<b>THEORY</b>							
<b>S.No</b>	<b>Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>H</b>	<b>Credit</b>
01	REEN 5101	Energy Resource and Characteristics	3	0	0	3	3
02	REEN 5102	Renewable Energy –I	3	0	0	3	3
03	REEN 5103	Research Methodology and IPR	2	0	0	2	2
04	REEN 5141 - 5143	Professional Elective I	3	0	0	3	3
05	REEN 5144- 5146	Professional Elective II	3	0	0	3	3
06	DIMA 5116	Disaster Management	2	0	0	0	0
	PDLS5118	Personality Development through Life Enlightenment Skills					
	YOGA5119	Stress Management by Yoga					
	SANS5120	Sanskrit for Technical Knowledge					
<b>Total Theory</b>							<b>14</b>
<b>LABORATORY</b>							
<b>S.No</b>	<b>Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>H</b>	<b>Credit</b>
01	REEN 5151	Measurement Analysis Lab	0	0	4	4	2
02	REEN 5152	Power Lab	0	0	4	4	2
<b>Total Practical</b>							<b>4</b>
<b>Semester Total</b>							<b>18</b>

  

<b>Professional Elective I</b>	<b>REEN 5141</b>	<b>REEN 5142</b>	<b>REEN 5143</b>
<b>Subject name</b>	Material for Renewable Energy Application	Thermal and Electrical Energy Fundamentals	Sustainable Application in Renewable Energy
<b>Professional Elective II</b>	<b>REEN 5144</b>	<b>REEN 5145</b>	<b>REEN 5146</b>
<b>Subject name</b>	Optimization Techniques	Applied Numerical Methods	Statistical Analysis

**HERITAGE INSTITUTE OF TECHNOLOGY**  
**TIME TABLE**  
**DEPARTMENT OF CHEMICAL ENGINEERING**

**M.Tech. (Renewable Energy) 1st year 1<sup>st</sup>Semester**

**Session 2021– 2022**

INITIAL	FULLNAME	DEPARTMENT
ARS	Prof. Aparna RaySarkar	Chemical Engineering
SWV	Prof. Swami Vedajnananda	Chemical Engineering
PS	Prof. Pramita Sen	Chemical Engineering
DS	Prof. Dwaipayan Sen	Chemical Engineering
DD	Prof. Diptendu Datta	Chemical Engineering
SB	Prof. Sangita Bhattacharjee	Chemical Engineering
SKS	Prof. Sukanta Saha	Mechanical Engineering
SM	Prof. Sudipta Mitra	Electrical Engineering
CR	Prof. Chandrima Roy	Electronics & Communication Engineering

**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH VLSI**

**SESSION: 2021-2022**

**1<sup>st</sup> YEAR, 1<sup>st</sup> SEMESTER**

DAY	9.00 AM – 9.55AM	9.55 AM – 10.50 AM	10.50 NOON – 11.45 PM	11.45AM- 12.25PM	12.25 PM – 1.20PM	1.20PM – 2.15 PM	2.15 PM – 3.10 PM	3.10 PM – 4.05 PM	4.05PM- 5.00PM	5.00PM- 5.55PM
MON	L/VLSI 5102/AS	L/VLSI 5102/AS	<b>LIBRARY</b>	Break						
TUE		L/VLSI 5142/SP	<b>L/VLSI 5142/SP</b>		L/ECEN 5103/MK	L/ECEN 5103/MK				
WED			<b>L/VLSI 5102/AS</b>		L/VLSI 5132/TC	L/VLSI 5132/TC				
THU	L/VLSI 5101/KD	L/VLSI 5101/KD	L/VLSI 5132/TC							
FRI	L/VLSI 5142/SP	L/DIMA5116/SR	<b>L/DIMA511 6/SR</b>		L/VLSI 5101/KD					

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH VLSI**

**SESSION: 2021-2022**

**1<sup>st</sup> YEAR, 1<sup>st</sup> SEMESTER**

**FACULTY NAMES**

Faculty names	Initials	Department
Prof.(Dr.) AnindyaSen	AS	ECE
Prof.(Dr.) SrabantiPandit	SP	ECE
Prof. Pratima Shaw	PS	ECE
Prof.(Dr.) MousikiKar	MK	ECE
Prof.(Dr.) Tapas Chakraborty	TC	ECE
Prof. KrishanuDatta	KD	ECE
Prof. (Dr.) Siuli Roy	SR	IT

**TA NAMES**

TA names	Initials	Department
Aditi Roy	AR	ECE
Pritam Kumar Sahu	PS	ECE

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**HERITAGE INSTITUTE OF TECHNOLOGY**  
TIME TABLE  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**M.TECH VLSI**

SESSION: 2021-2022

1<sup>st</sup> YEAR, 1<sup>st</sup> SEMESTER

**COURSE STRUCTURE**

M.Tech. VLSI  
1<sup>st</sup> Year, Semester I

A. Theory								
Sl. No.	Course Type	Code	Course Title	Contact Hours/Week				Credits
				L	T	P	Total	
1	Professional core 1	VLSI5101	Digital VLSI IC Design	3	0	0	3	3
2	Professional core 2	VLSI5102	Embedded Systems Design	3	0	0	3	3
3	Professional Elective PE-1	VLSI5131	DSP For VLSI System	3	0	0	3	3
		VLSI5132	VLSI IC Fabrication					
4	Professional Elective PE-2	VLSI5141	CAD of Digital System	3	0	0	3	3
		VLSI5142	Modelling of VLSI Device					
5	Mgt. Group	ECEN5103	Research Methodology and IPR	2	0	0	2	2
6	Audit 1	DIMA5116	Disaster Management	2	0	0	2	0
		INCO5117	Constitution of India					
		PDL5118	Personality Development					
		YOGA5119	Stress Management by Yoga					
		SANS5120	Sanskrit for Technical Knowledge					
Total of Theory				16	0	0	16	14

B. Practical								
1	Professional Core Lab1	VLSI5151	Digital VLSI IC Design Lab	0	0	4	4	2
2	Professional Core Lab2	VLSI5152	Embedded Systems Design Lab	0	0	4	4	2
Total of Practical				0	0	8	8	4
Total of Semester				16	0	8	24	18

To be effective from the date of commencement of 1st December,2021  
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