

Practical sessions integrated with theory courses

Course Structure of B.Tech (Electronics & Communication Engineering) First Semester

S.No.	Code	Subject	L	Т	P	С
1	BMAS0101	Engineering Mathematics- I	3	1	0	4
2	BPHS0002	Engineering Physics-I	<mark>3</mark>	1	0	<mark>4</mark>
3	BMEG0001	Basic Mechanical Engineering	3	1	0	4
4	BELH0001	English Language Skills for Communication – I	2	0	0	<mark>2</mark>
5	BECG0001	Electronics Engineering	<mark>3</mark>	1	0	<mark>4</mark>
6	BECG0800	Electronics Lab-I	0	0	2	1
7	BPHS0801	Engineering Physics Lab	0	0	2	1
8	BMEG0800	Engineering Workshop Practice Lab	0	0	2	1
9	BMEG0801	Engineering Drawing	0	0	2	1
10	BELH0801	English Language Lab I	0	0	2	1
		Total				23

Second Semester

S.No.	Code	Subject	L	Т	Р	С
1	BMAS0102	Engineering Mathematics-II	3	1	0	4
2	BCHS0101	Engineering Chemistry	<mark>3</mark>	1	0	<mark>4</mark>
3	BCSG0002	Computer Programming	<mark>3</mark>	0	0	<mark>3</mark>
4	BEEG0001	Basic Electrical Engineering	<mark>3</mark>	1	0	<mark>4</mark>
5	BELH0002	English Language Skills for Communication-II	<mark>2</mark>	0	0	<mark>2</mark>
6	BEEG0800	Electrical Engineering Lab	0	0	2	1
7	BECG1002	Digital Electronics	3	0	0	<mark>3</mark>
8	BECG0802	Digital Electronics Lab	0	0	<mark>2</mark>	<mark>1</mark>
9	BCHS0801	Engineering Chemistry Lab	0	0	<mark>2</mark>	<mark>1</mark>
10	BCSG0801	Computer Programming Lab	0	0	<mark>2</mark>	<mark>1</mark>
11	BELH0802	English Language Lab – II	0	0	<mark>2</mark>	<mark>1</mark>
		Total				25

ProgramCore (PC) (Credits - 48)

			cred							
S.			TEA	CHIN	G SCHI	EME				
No.	Code	SUBJECT	_	Ι_		Ι.	CREDITS	HRS/WK	Prerequisite	Coe requisite
1	BECC0001	Network Analysis and	L	1 1	P 0	O J	4	4	N/A	N/A
		Synthesis			U	U		4		
2	BECC0002	Electromagnetic Field Theory	3	1	0	0	4	4	N/A	N/A
3	BECC0003	Solid State Devices and Circuits	3	1	0	0	4	4	N/A	N/A
4	BECC0004	Signals and Systems	3	1	0	0	4	4	N/A	N/A
5	BECC0005 /BECC001 2	Microprocessors and Applications/ Advanced Microprocessor	3/ 4	0	0	0	3/4	3/4	N/A	Microproces sors Lab
6	BECC0800	Microprocessors Lab	0	0	2	0	1	2	N/A	N/A
7	BECC0006	Analog Integrated Circuits	3	0	0	0	3	3	SSDC	Electronics Lab-II
8	BECC0801	Electronics Lab-II	0	0	2	0	1	<mark>2</mark>	N/A	N/A
9	BECC0007	Control Systems	3	1	0	0	4	4	N/A	Control Systems Lab
10	BECC0802	Control Systems Lab	0	0	<mark>2</mark>	0	1	2	N/A	N/A
11	BECC0008	Communication Engineering	3	1	0	0	4	4	Signals and Systems	Communicat ion Lab
12	BECC0803	Communication Engineering Lab	0	0	2	0	1	2	N/A	N/A
13	BECC0009	Digital Communication	3	1	0	O	4	6	Communic ation Engineerin g	Digital Communicat ion Lab
14	BECC0804	Digital Communication Lab	0	0	2	0	1	<mark>2</mark>	N/A	N/A
15	BECC0010	Digital Signal Processing	3	1	0	0	4	4	Signals and Systems	Digital Signal Processing Lab
16	BECC0805	Digital Signal Processing Lab	0	0	2	0	1	2	N/A	N/A
17	BECC0011	VLSI Design	3	0	0	0	<mark>3</mark>	<mark>3</mark>	SSDC	CAD of Electronics Lab
18	BECC0806	CAD of Electronics Lab	0	0	2	0	1	1	N/A	N/A

Note:-LTPJC of 20244 means the course has 2 Units of Class room Lecture, no Tutorial, 1 Unit of Lab work and 1 Unit of Project.

Program Elective(PE) (Credits:26)

BOUQUET-I: COMMUNICATION ENGINEERING

Code	Courses	L	T	Р	J	С	Prerequisite	Coe requisite
BECE0070	Simulation Lab-II	0	0	2	0	1	N/A	N/A
BECE0001	Random Variables and Stochastic Processes	3	0	0	0	3	Fundamentals of Probability	N/A
BECE0002	Antenna & Wave Propagation	3	0	0	0	3	EMFT	N/A
BECE0003	Data Communication and Networks	3	0	0	0	3	Digital Communication	N/A
BECE0004	Microwave Engineering	3	0	0	0	3	EMFT	N/A
BECE0071	Microwave Lab	0	0	2	0	1	N/A	N/A
BECE0005	Optical Communication	3	0	0	0	3	SSDC	N/A
BECE0072	Optical communication Lab	0	0	2	0	1	N/A	N/A
BECE0006	Wireless Communication	3	0	0	0	3	Digital Communication	N/A
BECE0007	Information Theory & Coding	3	0	0	0	3	Digital Communication	N/A
BECE0008	Multicarrier Communication	3	0	0	0	3	Digital Communication	N/A
BECE0073	Multicarrier Communication Lab	0	0	2	0	1	Digital Communication	N/A
BECE0086	Multicarrier Communication Projects	0	0	0	8	2	Digital Communication	N/A
BECE0009	Spread Spectrum System	3	0	0	0	3	Digital Communication	N/A
BECE0010	Satellite Communication	3	0	0	0	3	Digital Communication	N/A
BECE0011	Long Term Evolution	3	0	0	0	3	Wireless Communication	N/A

BOUQUET-II: SIGNAL AND IMAGE PROCESSING

Code	Courses	L	Т	Р	J	С	Prerequisite	Coe requisite
BECE0070	Simulation Lab-II	0	0	2	0	1	N/A	N/A
BECE0001	Random Variable and stochastic Process	3	0	0	0	3	Fundamentals of Probability	N/A
BECE0101	Fundamentals of Digital Image Processing	3	0	0	0	3	S&S	N/A
BECE0102	Digital Image Processing	3	0	0	0	3	S&S	N/A
BECE0171	Digital Image Processing Lab	0	0	2	0	1	S&S	N/A
BECE0186	Digital Image Processing Project	0	0	0	8	2	S&S	N/A
BECE0103	Bio-Medical Image Processing	3	0	0	0	4	S&S	N/A
BECE0104	Analog Signal Processing	3	0	0	0	3	SSDC,S&S	N/A
BECE0105	Adaptive Signal Processing	3	0	0	0	3	DSP, RV&SP	N/A
BECE0106	Bio-Medical Signal Processing	3	0	0	0	3	Digital Signal Processing	N/A
BECE0171	Bio-Medical Signal Processing Lab	0	0	2	0	1	Digital Signal Processing	N/A
BECE0107	Speech Processing	3	0	0	0	3	Adaptive Signal Processing	N/A
BECE0172	Speech Processing Lab	0	0	2	0	1	Adaptive Signal Processing	N/A

BOUQUET-III: VLSI

Code	Courses	L	Т	P	J	С	Prerequisites	Coe requisite
BECE0070	Simulation Lab-II	0	0	2	0	1	N/A	N/A
BECE0001	Random Variable and stochastic Process	3	0	0	0	3	Fundamentals of Probability	N/A
BECE0201	Fundamentals of HDL Programming	3	0	0	0	3	DE	N/A
BECE0202	Digital System Design using HDL	3	0	0	0	3	DE	BECE0271
BECE0271	Digital System Design using HDL LAB	0	0	2	0	1	DE	N/A
BECE0286	Digital System Design using HDL PROJECT	0	0	0	8	2	DE	N/A
BECE0203	Analog VLSI Design	3	0	0	0	3	S&S	N/A
BECE0204	VLSI Testing And Testability	3	0	0	0	3	VLSI Design	N/A
BECE0205	Integrated Circuit Technology	3	0	0	0	3	VLSI Design	N/A
BECE0206	Fundamentals of Low- Power VLSI Circuits and Systems	3	0	0	0	3	VLSI Design	N/A
BECE0207	Low-Power VLSI Circuits and Systems	3	0	0	0	3	VLSI Design	N/A
BECE0272	Low-Power VLSI Circuits and Systems Lab	0	0	2	0	1	VLSI Design	<mark>N/A</mark>
BECE0287	Low-Power VLSI Circuits and Systems Project	0	0	0	8	2	VLSI Design	N/A
BECE0208	Fundamentals of RF Integrated Circuits	3	0	0	0	3	SSDC. Comm Engg.	N/A
BECE0209	RF Integrated Circuits	3	0	0	0	3	SSDC. Comm. Engg.	N/A
BECE0273	RF Integrated Circuits Lab	0	0	2	0	1	SSDC. Comm. Engg.	N/A
BECE0288	RF Integrated Circuits Project	0	0	0	8	2	SSDC. Comm. Engg.	N/A
BECE0210	Micro and Nano devices	3	0	0	0	3	SSDC	N/A

BOUQUET-IV: CONTROL AND EMBEDED SYSTEM

Code	Courses	L	Т	Р	J	С	Prerequisite	Coe requisite	
BECE0070	Simulation Lab-II	0	0	2	0	1	N/A	N/A	
BECE0001	Random Variable and stochastic Process	3	0	0	0	3	Fundamentals of Probability	N/A	
BECE0301	Electronic Instruments and Measurements	3	0	0	0	3	N/A	N/A	
BECE0302	Microcontrollers and Embedded Systems	3	0	0	0	3	Microprocessors	N/A	
BECE0303	Embedded Systems Design	3	0	0	0	3	Microprocessors	N/A	
BECE0371	Embedded Systems Lab	0	0	2	0	1	N/A	N/A	
BECE0386	Embedded Systems Project	0	0	0	8	2	N/A	N/A	
BECE0304	Intelligent System	3	0	0	0	3	Control System	N/A	
BECE0305	Industrial Process Control	3	0	0	0	3	Control System	N/A	
BECE0372	Industrial Process Control Lab	0	0	2	0	1	Control System	N/A	
BECE0387	Industrial Process Control Project	0	0	0	8	2	Control System	N/A	
BECE0306	Digital Control System	3	0	0	0	3	Control System and Signal systems	N/A	
BECE0307	Modern control system						Control System	N/A	
BECE0308	Industrial Automation	3	0	0	0	3	Digital Electronics. Control System	N/A	
BECE0373	PLC Automation Lab	0	0	2	0	1	Digital Electronics. Control System	N/A	
BECE0311	Adaptive Control	3	0	0	0	3	Control System	N/A	

BOUQUET-V: OPEN ELECTIVES

Code	Courses	L	Т	Р	J	С	Prerequisite	Coe requisite	
BECE0070	Simulation Lab-II	0	0	2	0	1	N/A	N/A	
BECE0001	Random Variable and stochastic Process	3	0	0	0	3	Fundamentals of Probability	N/A	
BECE0301	Electronic Instruments and Measurements	3	0	0	0	3	N/A	N/A	
BECE0302	Microcontrollers and Embedded Systems	3	0	0	0	3	Microprocessors	N/A	
BECE0303	Embedded Systems Design	3	0	0	0	3	Microprocessors	N/A	
BECE0371	Embedded Systems Lab	0	0	<mark>2</mark>	0	1	N/A	N/A	
BECE0386	Embedded Systems Project	0	0	0	8	2	N/A	N/A	
BECE0304	Intelligent System	3	0	0	0	3	Control System	N/A	
BECE0305	Industrial Process Control	3	0	0	0	3	Control System	N/A	
BECE0372	Industrial Process Control Lab	0	0	2	0	1	Control System	N/A	
BECE0387	Industrial Process Control Project	0	0	0	8	2	Control System	N/A	
BECE0306	Digital Control System	3	0	0	0	3	Control System and Signal systems	N/A	
BECE0307	Modern control system						Control System	N/A	
BECE0308	Industrial Automation	3	0	0	0	3	Digital Electronics. Control System	N/A	
BECE0373	PLC Automation Lab	0	0	2	0	1	Digital Electronics. Control System	N/A	
BECE0311	Adaptive Control	3	0	0	0	3	Control System	N/A	

Project Work(PW)

S.	Code	SUBJECT	TEA	CHING SCH	EME		CREDITS	Droroguioito
No.	Code	SUBJECT	L	Т	P	J	CKEDIIS	Prerequisite
1	BECJ0950	Mini Project-I	0	0	0	4	1	N/A
<mark>2</mark>	BECJ0951	Mini Project-II	0	0	0	4	1	N/A
3	BEC0952	Mini Project-III	0	0	0	8	2	N/A
4	BECJ0971	Project-I	0	0	0	<mark>12</mark>	3	144 Credits earned and CPI>=5.5
<mark>5</mark>	BECJ0972	Project-II	0	0	0	<mark>32</mark>	8	144 Credits earned and CPI>=5.5
<mark>6</mark>	BECJ0991	Industrial Training	0	0	0	8	2	N/A

Course Structure of MBA in Logistics & Supply Chain Management

			INSTITUTE OF BUSINESS MANAGEMENT MBA In Logistics and SCM	
S. no.	Trimester	Code	Subject	Credits
1		MLSC0019	Core concepts of SCM	3
2		MLSC0002	Accounting For Managers	3
3		MLSC0003	Managerial Economics	3
4		MLSC0004	Management Concepts and Applications	3
5	I	MLSC0005	Managerial Communication	3
6		MLSC0006	Workshop on basics of Supply Chain Management	3
7		MLSC0007	Computer Applications in Business Management	3
8		MLSC0008	Managerial Aptitude – I	1
			Total	22
1		MLSC0009	Legal Aspects of Business	3
2		MLSC0010	Workshop on recent trends in Logistics and SCM	3
3	II	MLSC0011	Cost and Managerial Accounting	3
4		MLSC0029	Procurement and Inventory Management	3
5		MLSC0013	Business Research Methods	3

7 MLSC0021 Fundamentals of Marketing Management 8 MLSC0016 Managerial Aptitude – II Total	3 1 22 3
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Total	
	3
1 MLSC0017 Finance for Managers	
2 MLSC0018 Management of Human Resource	3
3 Work shop on Indirect Tax and Documentation	3
4 MLSC0020 Optimization in Operations Research	3
5 MLSC0031 Principles of ERP	3
6 MLSC0022 Production and Operations Management	3
7 MLSC0023 Logistics in Business Efficiency	3
8 MLSC0024 Managerial Aptitude – III	1
Total	22

S.	Trimester	Code	Subject	Credits
no.				
1		MLSC0032	Analytics For Supply Chain	3
2		MLSC0033	Strategic Supply Chain Management	3
3		MLSC0034	Warehouse Management	3
4		MLSO0001	Recent trends in Supply Chain Management	3
5	IV	MLSO0002	Strategic and Operational issues in Supply Chain Management	3
6		MLSO0003	Supply Chain Performance Metrics & Modeling	3
7		MLSO0005	Liner Shipping Business	3
8		MLSJ0001	Summer Internship Report#	6
9		MLSC0028	Managerial Aptitude – IV#	1
			Total	25
1		MLSJ0002	Term assignment	<mark>6</mark>
2		MLSO0006	Recent Trends in E-Commerce	3
3		MLSC0025	Ethics and Governance in Business	3
4	V	MLSC0027	International Business	3
			Total	15

1		MLSJ0004	Comprehensive Viva Voce	3
2		MLSC0035	Global Logistics	3
3	VI	MLSC0036	Commercial Geography	3
		MLSO0004	Global Trade Operations and Forwarding	<mark>3</mark>
		MLSJ0005	Dissertation Report	<mark>6</mark>
		Total		18
	Gros	s Total		124

Course Structure of B.Tech. (Biotechnology)

First Semester

S. NO.	CODE	SUBJECT		EACHII CHEM		CREDITS	CONTACTS HRS/WK	
NO.			L	Т	Р		UK3/WK	
1.	BMAS 0130 BBTS 0001	Elementary Mathematics-I/ Introduction to Biology	3	1	0	4	4	
2.	BCHS0101	Engineering Chemistry	3	1	0	4	4	
3.	BELH0001	English Language skill for communication-I	2	0	0	2	2	
4.	BEEG0001	Electrical Engineering	3	1	0	<mark>4</mark>	4	
5.	BCSG0001	Python programming	4	1	0	<mark>5</mark>	<mark>5</mark>	
		PRACTI	ICALS					
6	BCHS0801	Engineering Chemistry Lab	0	0	2	1	2	
7	BELH0801	English Language Lab -I	0	0	2	1	2	
8	BEEG0800	Electrical Engineering Lab-I	0	0	2	1	<mark>2</mark>	
9	BCSG0800	Python programming Lab	0	0	2	1	2	
10	BMEG0801	Engineering Drawing Lab	0	0	2	1	2	
		TOTAL	15	4	10	24	29	

Second Semester

S. NO.	CODE	SUBJECT		EACHII CHEM		CREDITS	CONTACTS HRS/WK	
NO.			L	Т	Р			
1.	BMAS0131	Elementary Mathematics II	3	1	0	4	4	
2.	BPHS0001	Engineering Physics	3	1	0	4	4	
3.	BBTC0002	Animal and plant physiology	3	1	0	4	<mark>4</mark>	

4.	BELH0002	English Language skill for communication-II	2	0	0	2	2
5.	BECG001	Electronics Engineering	3	1	0	4	4
6.	BMEG0001	Basic Mechanical Engineering	3	1	0	<mark>4</mark>	4
		PRAC	TICALS				
7	BPHS0801	Engineering Physics Lab	0	0	2	1	2
8	BELH0802	English Language Lab II	0	0	2	1	2
9	BECG0800	Electronics engineering Lab I	0	0	2	1	2
10	BMEG0800	Engineering Workshop Practice Lab	0	0	2	1	2
11	BBTTC0801	Animal and plant physiology Lab	0	0	2	1	2
	_	TOTAL	17	5	10	27	32

Program Core

S.	CODE	SUBJECT		EACH SCHE			CREDITS	CONTACTS HR/WK	PRE- REQUISITES	
NO.	0051	3323231	L	Т	Р	J	CRE	CONT HR,	TRE-REGUISITES	
	THEORY									
<mark>1.</mark>	BBTC 0003	Cell Biology	<mark>3</mark>	0	0	0	3	<mark>3</mark>		
<mark>2.</mark>	BBTC 0004	Biomolecule & Biochemistry	3	0	0	0	3	3		
<mark>3.</mark>	BBTC 0005	Food Technology	3	0	0	0	<mark>3</mark>	<mark>3</mark>		
<mark>4.</mark>	BBTC 0006	Bioanalytical techniques	3	1	0	0	<mark>4</mark>	<mark>4</mark>		
<mark>5.</mark>	BBTC 0007	Microbiology	3	0	0	0	3	3		
<mark>6.</mark>	BBTC 0008	Genetics and Molecular Biology	3	0	0	0	3	3		
<mark>7.</mark>	BBTC 0009	Recombinant DNA Technology	3	0	0	0	<mark>3</mark>	3		
<mark>8.</mark>	BBTC 0010	Immunology	3	1	0	0	<mark>4</mark>	<mark>4</mark>		
<mark>9.</mark>	BBTC 0011	Biochemical and Bioprocess Engineering	3	0	0	0	3	3		
<mark>10.</mark>	BBTC 0012	Genomics and Proteomics	3	1	0	0	<mark>4</mark>	4		
<mark>11.</mark>	BBTC 0013	Animal Biotechnology	3	0	0	0	3	3		
<mark>12.</mark>	BBTC 0014	Plant Biotechnology	3	0	0	0	3	3		
13.	BBTC 0015	Bioethics and IPR	3	0	0	0	3	3		
	PRACTICALS									
<mark>14.</mark>	BBTC 0802	Biochemistry Lab	0	0	2	0	1	2		

<mark>15,</mark>	BBTC 0803	Bioanalytical techniques Lab	0	0	2	0	1	2	
<mark>16.</mark>	BBTC 0804	Microbiology and Immunology Lab	0	0	2	0	1	2	
<mark>17</mark>	BBTC 0805	RDT and Molecular Biology Lab	0	0	2	0	1	<mark>2</mark>	
<mark>18.</mark>	BBTC 0806	Animal Biotechnology Lab	0	0	<mark>2</mark>	0	1	<mark>2</mark>	
<mark>19.</mark>	BBTC0807	Plant Biotechnology Lab	0	0	<mark>2</mark>	0	1	<mark>2</mark>	
	Total			3	12	0	48	54	

Program Elective

S.	CODE	SUBJECT		TEAC SCH	HING EME		CREDITS	CONTACTS HR/WK	PRE- REQUISITES
NO.	CODE	SOMEOT	L	Т	P	J	CRE	CONT HR/	
		Bouquet: Genetic I	Eng	ine	eri	ng			
		THEORY							
1.	BBTE0006	Nano-biotechnology	3	0	0	0	3	3	
2.	BBTE0007	Microbial Biotechnology	3	0	0	0	3	3	
3.	BBTE0008	Protein Engineering	3	0	0	0	3	3	
4.	BBTE0009	Molecular Therapeutics and Vaccinology	3	0	0	0	3	3	
5.	BBTE0010	Virology and Cancer Biology	3	0	0	0	3	3	
6.	BBTE0011	Molecular Diagnostics	3	0	0	0	3	3	
		PRACTICAL	_S						
7.	BBT0813	Nano-biotechnology Lab	0	0	<mark>2</mark>	0	1	2	
8.	BBT0814	Microbial Biotechnology Lab	0	0	2	0	1	2	
9.	BBT0815	Molecular Diagnostics and Therapeutics Lab	0	0	2	0	1	2	

Program Elective

S.	CODE	SUBJECT	TEACHING SCHEME				CREDITS	CONTACT S HR/WK	PRE- REQUISITES		
NO.			L	Т	Р	J	CRE	CON S HF			
	Bouquet: INDUSTRIAL BIOTECHNOLOGY										
		THEO	RY								
1.	BBTE0012	Industrial Enzymology	3	0	0	0	3	3			
2.	BBTE0013	Food Biotechnology	3	0	0	0	3	3			
3.	BBTE0014	Industrial Waste Management	3	0	0	0	3	3			
4.	BBTE0015	Fermenter and Bioreactor Designing	3	0	0	0	3	3			
5.	BBTE0016	Downstream Processing	3	0	0	0	3	3			

6.	BBTE0017	Biopharmaceuticals	3	0	0	0	3	3	
PRACTICALS									
7.	BBT0816	Fermenter, Bioreactor designing and Downstream Processing Lab	0	0	2	0	1	2	
8.	BBT0817	Food and Industrial Enzymology Lab	0	0	2	0	1	2	
9.	BBT0818	Biopharmaceutical and Industrial waste management Lab	0	0	2	0	1	2	

Program Elective

		Program E	ICC	, LIV	<u> </u>						
S. NO.	CODE	SUBJECT	1	EACHI	NG SC	HEME	CREDITS	CONTACTS HR/WK	PRE- REQUISITES		
NU.			L	Т	P	J	CRI	CON			
	Bouquet: BIOINFORMATICS										
		THEC	RY								
1.	BBTE0001	Computer Aided Drug Designing	3	0	0	0	3	3			
2.	BBTE0002	Algorithms for Bioinformatics	3	0	0	0	3	3			
3.	BBTE0003	Computational Molecular Biology	3	0	0	0	3	3			
4.	BBTE0004	Biological Data Mining	3	0	0	0	3	3			
5.	BBTE0005	Bio python	3	0	0	0	3	3			
6.	BBTE0006	Proteomics & Transcriptomics	3	0	0	0	3	3			
		PRACTI	CAL	S							
7.	BBT0810	Computer Aided Drug Designing Lab	0	0	2	0	1	2			
8.	BBT0811	Computational Molecular Biology Lab	0	0	2	0	1	2			
9.	BBT0812	Bio python Lab	0	0	2	0	1	2			

Program Elective

S.	CODE	SUBJECT		TEAC SCH			CREDITS	CONTACTS HR/WK	PRE- REQUISITES
NO.			L	Т	P	J	CRE	CONT	
	Bou	quet: COMPUTER AND IN	FΟ	RM	ATI	ON	TE	CHN	OLOGY
		THEC	RY						
1.	BCSC0006	Data Structures & Application	3	0	0	0	3	3	
2.	BCSO0003	Essentials of Information Technology	3	0	0	0	3	3	
3.	BCSE0105	Introduction to Machine Learning	3	0	0	0	3	3	
4.	BCSE0155	Big Data Analytics	3	0	0	0	3	3	
5.	BCSE0157	Natural Language Processing	3	0	0	0	3	3	
		PRACTI	CAL	S					
6	BCSC0805	Data Structures & Application Lab	0	0	2	0	1	2	
7	BCSO0072	Information Technology lab	0	0	2	0	1	2	
8.	BCSE0182	Big Data Analytics Project	0	0	2	0	1	2	

Projects

S.	CODE	SUBJECT		TEAC SCH			CREDITS	CONTACTS HR/WK	PRE- REQUISITES
NO.			L	T	P	J	CRE	CON. HR	
1.	BBTJ001	Mini Project – I	0	0	0	0	2	0	
2.	BBTJ002	Mini Project – II	0	0	0	0	2	0	
3.	BBTJ003	Project – Part I	0	0	0	0	3	0	
4.	BBTJ004	Project – Part II	0	0	0	0	8	0	
5.	BBTJ0801	Industrial Training	0	0	0	0	2	0	



Skill Development Programs



Institute of Business Management

Skill Development Programs

S.No.	Topic	Date
1.	Soft skills for Business Negotiations and Marketing Strategies	16.11.2016
2.	Developing Entrepreneurial skills	17.10.2017
3.	Employability skills enhancement programme	18.09.2018
4.	Digital Literacy programme for IT skills	14.10.2019
5.	How to enhance Academic writing skills	12.10.2020
6.	How to be a better manager?	15.02.2021

Introduction

Skill Development is the process of identification of the skills gap in youth and providing skilling training & employment benefits to them. Skill development programs aim to acknowledge the ability of the youth and extend their support by serving them with the proper guidance, infrastructure, opportunities, and encouragement that help them achieve their ambitions. Education and skills are essential for everyone, and they both walk hand in hand in everyone's career journey. They are the roots behind the economic growth and community development of a country. Therefore, both central & state governments are continuously making efforts to provide skill development to the youth with their skilling partners around the country.

The benefits of Skill Development include increased business profits, improved performance, improved accuracy & quality, improved communication, complies with rules & regulations, improved recruitment & career opportunities, and development of good customer relations.

Overcoming the challenges:

- Low intrinsic "aspiration quotient" resulting in low demand for vocational skilling programs.
- Employers cite the shortage of skilled students as a constraint
- Skill development scenario is still evolving with different agencies handling the same agenda, absence of standards, lack of training capacity.



Soft skills for Business Negotiations and Marketing Strategies

Institute of Business Management always focus course is to highlight various categories and applications of soft skills through various cases extracted from the real field and other research case studies. The fundamental concepts and distinctions between Soft Skills and Hard Skills are discussed. This program course is tailored very effectively to introduce various soft skill application examples. This course would be very useful for the students, practicing professionals as well as common people who are voluntarily or involuntarily involved in negotiations and strategies in daily life. The lectures supported with illustrative sketches, analysis and demonstrative enactments, in addition to the digital illustrations time to time with various examples. This facilitates easy comprehension for the students of different level of ability and exposure. Multiple illustrations with case studies strengthen this course disseminated with lucid lectures. soft skills are people skill that means, students be always communicating with somebody So, people skill is very important because we are living in the society, company with many, and within which we are manifesting trying to convince somebody and trying to communicate to somebody, so Basically it is a people skill that means, a skill which we have to deal with people, but that is highly based on the personal attributes and emotional intelligence.

Objectives:

- Enhance soft skill to engage comfortable with a customer at their level and on their terms.
- Develop the Ability to add value with the help of skills to understand the customer at every stage of the process, leaving aside self-interest.
- Skilled at active listening along with asking discovery questions to uncover business challenges.
- Equip the Business acumen.
- They are trained to know that sales negotiation is a process not an event, so they constantly use the 3Ps of selling Prepare, Probe, and Propose.

- Understands how to build credibility and add value to a customer's life.
- sales skill to pinpoint, quantify and communicate clearly the value their proposed solution will bring to the customers business.

Key areas covered: softskills, Innovative skills, Social Skills, Marketing skills

Outcomes:

In addition to the outdoor survival and bushcraft skills, participants will develop their social and work-life skills, as well as their personal and emotional well-being, including:

Resilience – learning to keep going when things don't go according to plan, coping with the unfamiliar, managing disappointment and dealing with conflict

Teamwork – learning to connect and work with others to achieve a set task

Leadership – assessing the requirements of a task, identifying the strengths within the team, utilising the diverse skills of the group to achieve the set objective, awareness of risk/safety Communication – demonstrating clear briefing and listening skills, not being afraid to ask for help and support when necessary

Emotional maturity and emotional health – learning to handle emotions including tolerance and behavioural responses, building positive friendships and bonding with peers and classmates, learning to show understanding and to demonstrate respect for the opinions, personal space and beliefs of others

Confidence and enthusiasm for learning – developing self-motivation, raised aspirations and belief in one's own abilities, defining and committing to achieving one's goals

Citizenship – raising awareness of one's place and role within a community through volunteering and conservation opportunities

Responsibility – for one's self, learning self-reliance and independence

Employability skills – time and resource management, conflict resolution, teaching and mentoring others







Developing Entrepreneurial Skills

Entrepreneurship promotion and development Programmes are being organized regularly to nurture the talent of youth by enlightening them on various aspects of industrial/business activity required for setting up MSEs. These Programmes are conducted for youth and other people interested to set up their own industrial/self-employment venture. Such activities are also organized in ITIs, Polytechnics and other technical institutions/business schools, where skill/talent is available to motivate them towards self-employment.

Objectives:

To make student learn compliance with law. To develop and fortify entrepreneurial quality, i.e., motivation or need for achievement. To develop small and medium scale enterprises in order to generate employment and widen the scope of industrial ownership.

Key areas covered

Comprehensive training programmes to upgrade skills of prospective entrepreneurs, existing workforce and also to develop skills of new workers and technicians of MSEs. To enhance the decision-making capabilities of existing & potential entrepreneurs resulting in higher productivity and profitability.

Outcomes

Developed advanced knowledge on how to assess business opportunities and an in-depth understanding of what typically characterize successes and failures along with different methods to assess the attractiveness of business opportunities and able to what characterizes an attractive business opportunity and common pitfalls during the entrepreneurial process with advanced knowledge about key processes necessary to bring new products and services to market and key challenges facing the entrepreneur at different stages of the entrepreneurial voyage. Get the exposure of key risks and different methods that can be used to minimize uncertainties at different stages of the entrepreneurial process. Atlast students able to

effectively combine understanding of technology and entrepreneurship skills in a cross-disciplinary fashion to identify and able to find attractive opportunities.





Employability skills enhancement programme

Institute of Business Management always strive to produce MBA graduates in a fully equipped way with required skills to achieve the highest personal and professional standards by means of intensive hands-on training on state-of-the-art with ICT tools where Employability enhancement programs are crafted in order to bridge the gap between skills possessed in the students and the abilities that are looked for by the organization. These programs assist the students who are at MBA Level. In this session students aware about the goal setting and action planning where he students to identify and formulate strategies to achieve their short term and long-term goals. Knowing these steps will allow students to formulate goals that they can then accomplish along with activities that integrate four basic language skills: listening, speaking, reading and writing are carried out round the year for student's development. Student's Progress is consistently monitored and constructive feedback is provided from time to time.

Objectives: To develop skills of students and provide corporate jobs. The spirit of workmanship and the awareness of professionalism are imparted to the students through such events.

• Key areas covered:Placement training program (Aptitude training),Company based Specific Training, Mock Interview by HR experts.

Outcome:

As we know today, employers seek certain attributes, abilities, and skill-sets before hiring the bestStudents forUniversity. Management education needs to be aligned with Industry requirements. GLA University understands that even after the robust curriculum coverage, academic and industry certificates, and various other training programs, working in a corporate atmosphere is a bit overwhelming for students. Therefore, to eliminate all types of apprehensions, and to inculcate corporate-ready skills in students, so we devised its flagship employability enhancement program for the MBA students. This program makes them

capable of performing their duties in an organization without chaos or fears of any kind. This program is an outcome of the vast number of research hours spent by our faculty in coordination with the placement team and industry leaders. Our years of experience in the management education field, our faculty acumen, and our strong placement record, make us capable of delivering the best of the breeds to the industry.







Digital Literacy Programme for IT Skills

portfolio (letter of application, resume, etc).

Many Students eager to impart skills on Digital literacy where the ability to navigate the importance of digital world using reading, writing, technical skills, and critical thinking. And It's using technology—like a smartphone, PC, e-reader, and more—to find, evaluate, and communicate information. With Digital Literacy classes, students gained skills needed to effectively explore the Internet. This digital literacy programme helps individuals to gain the digital skills necessary to engage in a digital economy and improve livelihoods.

Objectives: To Identify and apply basic computer operating skills. Along with Identify basic system maintenance operations for hardware and software. With the detail Explanations of concepts, terminology, and applications of: windows operating system, and integrates software package (Microsoft Office). Demonstrate a basic understanding of issues regarding software copyright, software licensing, software copying, computer viruses, and ways to protect computers from computer viruses. Demonstrate a basic understanding of the impact of computers on society. Research and analyse career opportunities in information processing and develop an employment

Key areas covered:

This program is designed to provide students with entry-level experience with practical applications through hands-on use of word processing, presentation, database, spreadsheets, Internet, and e-mail to prepare documents and reports. The impact of computers on society and ethical issues are presented along with the Integration of applications and Windows.

Outcome:

Institute of Business Management organised this programme to help Digitally literate learners learn to become independent, confident and discerning users of technology. Subsequently they acquire and develop critical and analytical attitudes to appropriately choose the right digital tools according to specific needs. It includes five

categories of digital competencies, namely: Information Management, Communication and Collaboration, Digital Media, Using Digital Tools for Learning, Management of the Internet. The competence in information management enables learners with the means to access, evaluate and analyse and hence make an informed choice from a range of available data and information sources. Competencies relating to Communication and Collaboration empower learners to learn to communicate, collaborate and network with others. Competencies in Digital Media enable learners to analyse messages mediated by digital media and to express themselves creatively across a range of digital media.

Learners learnt to beresponsible and competent in managing the internet, keeping themselves safe and secure online, making informed choices over privacy, taking responsibility for their actions, respecting intellectual property, abiding by the terms and conditions of systems they use and respecting the rights and feelings of others. In teaching digital literacy, students should look for authentic, meaningful and socially inclusive learning opportunities which allow learners to apply and develop their skills, knowledge and understanding across the curriculum. Digitally literate learners able to undertake challenging creative projects, both individually and collaboratively comprising aspects from different competence categories.







How to Enhance Academic Writing Skills

The purpose of this Activity is to enhance MBA students' writing quality in terms of Academic writing styles. The students introduced to several writing genres such as descriptive essays, process essays, classification essays, comparison-contrast essays, cause-effect essays, and argumentative essays. The ultimate purpose is to help students improve their writing skills when they conduct their writing assignments for some course-work or to write up their RPR Research project reports apart from this review of writing paragraphs, Paragraph structures.

Objectives:

The purpose of this course is to provide participants with the opportunity to improve their skills in writing a research article and other academic texts.

Key areas covered:

Write a research article, review article, thesis chapter and other related academic research text, demonstrate understanding of the ways in which writers, texts and readers interact, - Make appropriate grammatical and lexical choices in their text, Make appropriate choices about register and Structure information effectively.

Outcomes:

This programme helps students where Academic writing is taught in conjunction with Academic Reading as these skills often overlap; for example, academic reading leads to academic writing in the form of researched essays, reports and dissertations, so the two skill areas are taught together. This means that the separate Reading and Writingskills wereenhanced, so Academic writing serves as a tool of communication that conveys acquired knowledge in a specific field of study. Writing academically helps students analyse, convey understanding, think critically and focus on technique and style.







How to Be a Better Manager

Institute of Business Management always understand that being a manager can be challenging. Where students require knowing how to align people and resources to achieve goals, navigating complex decisions, and giving and eliciting feedback. This session helps the students to exercise sound judgment and make decisions is paramount to being a manager. IBM Always focus students to develop decision making by follow the process which comprised three elements 1. Quality: It involves an in-depth analysis of a problem and a comparison of different options 2. Executability: It requires buy-in from your team to increase the odds that the decision will be well executed. 3. Timeliness: It's implemented at the right time—neither too early nor too late.

This program helps students to establishing goals, along with provide a roadmap for work that needs to be done. Students must understand the necessarywhile linked to a set of deliverables with actionable tasks—so that they have a clear view of how their contributions are tied to larger organizational outcomes later

Objectives:

Students will learn how to become a manager that influences others with their team as well and able to I learn how to handle people around you in a positive way along with how to avoid common mistakes that managers make interacting with people and at last to understand the secrets of influential management practice.

Key areas covered:

Learn how to become influential and improve your management skills. Improve Your Management Skills - Influential Manager

Outcome

Students must understand that a manager's job is hard, especially if struggling to influence those around them, both those above and those below the level of position.But if we can learn to become influential and learn how successful managers influence those around them, both

teammembers, peers and even bosses, then we can climb the path to a successful career in management in rapid time. **Get Result accordingly** Influential managers are the managers that get ahead. By becoming an influential manager, we can increase income, improve self-esteem and accelerate career advancementand improve your management skills and career by becoming an influential manager. Students learnt the basics how to become a manager that influences those around, including team, colleagues and own managers and bosses apart how to influence people around in a positive way and how to avoid common mistakes that managers make interacting with people and understand the secrets of influential management practice.





Learning through Projects

Learning through Projects

At GLA, experiential, active, field based as well as class based activities are important part and are therefore integrated into the program's curriculum. In all programmes there is a provision of live projects, Industry internship projects and research projects. For Example: In MBA curriculum, one of the major activities of field based learning is Summer Industrial Internship of 6-8 weeks that provides an opportunity to learn various dimensions of management functions in corporate / company environment and get a glimpse of the real world. Students submit a report worth 6 credits, that is discussed during presentation and viva conducted by external expert(s). Engineering students undertake projects and industrial training of 4-5 months where they see how factories and real corporate world works. With our numerous Industrial Tie-ups, Industrial Internships and Trainings are easy to get. Getting attached to a village, our B.Sc. (Hon.) Agriculture students get valuable practical exposure through our "Agro-Industrial Attachment" and "Rural Agricultural Work Experience" programs.

Sample Information of some projects is as below:

Sample Information of Project base Learning

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project
1		Piyush Agrawal	171520020	Fake News Detection	Research Project
2		Pragya Tiwary	171520021	Fake News Detection	Research Project
3		Milan Kumar	171520018	Automated Image Captioning	Research Project
4		Nishtha Singh	171520019	Human Activity Prediction	Research Project
5	Department of Computer Science	Anshul Bansal	1715120005	Movie Recommendation System Using Machine Learning	Research Project
6		Chinmaya Sharma	1715120009	Movie Recommendation System Using Machine Learning	Research Project
7		Aditi Gupta	171510007	Investment Prediction	Research Project
8		Ashree Verma	171520007	Investment Prediction	Research Project
9		Gyanesh Gupta	17150012	Automated Image Captioning	Research Project
10		Hemant Kumar	171520013	Investment Prediction	Research Project
11	Department of Mechanical Engineering	Aditendra Singh Faujdar	198120007	Optimization of EDM Machining Parameters for D3 tool steel using Taguchi and Anova	Research Project
12		Akash Gupta	198120002	Mechanical Properties Improvement using equal channel angular pressing (ECAP) of Al6063	Research Project
13		Aman Yadav	198120003	Mechanical Properties of functionalized graphene/epoxy nanocomposites: An experimental and simulation study	Research Project
14		Ojestez Tripathi	198120004	Processing and comparative evaluation of Al2O3/Mg/AA6061 Aluminium Metallic Foam	Research Project
15		Jigyasa Singh	171200072	Free Vibration anlysis of laminated plates	Research Project
16		Prachi Singhal	171200102	Exergetic Analysis of modified solar flat plate collector for water heating	Research Project
17		Harshit Sehgal	171200063	Design and Fabrication of automatic wall painting machine	Research Project
18		Hemant Kumar Singh	171200065	Modification in low oil transmission system	Research Project
19		Trivendra Singh	181200115	Investigation of Process Prameters of EDM using GRA approach for Titanium Alloy	Research Project
20		Gautam Saraswat	191200037	Evaluation of wear properties of Ti-6Al-4V Alloy	Research Project

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project
21		Sarthak Jain	171300071	Energy efficient mobile user localization in wireless sensor network	Project-II
22		Saurabh Kumar	171300072	Motion controlled Land mine detector with embedded and IOT	Project-II
23		Saurabh Tripathi	171300073	Voice and navigation controlled smart wheel chair	Project-II
24	Department of	Saurav Varshney	171300075	Smart distance measurement device for vehicles	Project-II
25	Electronics and	Shantanu Gaur	171300076	Single and three link joint manipulator	Project-II
26	Communication Engineering	Shashank Saxena	171300077	Monitoring system using multiple sensor for infants and patients	Project-II
27		Vaibhav	181300103	SMART FITNESS MACHINE	Mini Project-III
28		Vaibhav Sharma	181300104	IoT Based Voting System	Mini Project-III
29		Vedant Pandey	181300105	Traffic Control System based on Emergency Vehicle using RFID	Mini Project-III
30		Vibhor Singh Gautam	181300106	Numerical modeling of lead-free perovskite using inorganic charge transport materials	Mini Project-III
31		Amit Pratap Singh	198110001	Analysis and simulation of a photovoltaic power plant (10 kW) using Matlab and simulink	Research Project
32		Ankita Saxena	198110002	Speed Control of BLDC Motor using PI, PID & Fuzzy-PI Controller	Research Project
33	Department of	Vishal Prajapati	208110004	IMPACT OF RENEWABLE ENERGY INTEGRATION ON POWER SYSTEM OPERATION	Research Project
34	Electrical	Anju Upadhyay	198111001	Protection of overloading passengers in vehicles by IOT Application	Research Project
35	Engineering	Nagendra Singh	181100029		
36		Nikhil Baranwal	181100030	Solar Water Desalinator and Purifier Machine	Mini Project
37		Pranav Tripathi	181100033	Solar water Desamilator and runner watering	willi i ioject
38		Siddhartha Singh	181100046		
39		Arpit Madnawat	181300014		
40		Bharat Singh	191199004	Smart Energy Grid	Mini Project
41		Madhur Bharti	181100027	Smart Energy Ond	willi Project
42		Prabhat Sharma	171100028		

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project
43		Prashant Kumar	198100005	Experimental study of the fresh and hardened stage properties of GGBS and calcined clay based Geopolymer mortar	Dissertation
44		Veer Vikram Pratap Singh	198100007	Comparitive Study of mechanical properties of cementious material with different pozzolanic materials incorporating super absorbent polymer	Dissertation
45	Department of Civil	Ajendra Singh	171000003		Dissertation
46	Engineering	Bhanu Pratap Singh	171000013	Public private partnership in municipal solid waste	Dissertation
47		Pankaj Meena	171000028	in India	Dissertation
48		Rajkamal Yadav	181099016		Dissertation
49		Anurag Upadhyay	171000008		Dissertation
50			171000011	A review in application of geosynthetic on	Dissertation
51		Prashant Sharma	181099013	embankments and soft ground	Dissertation
52		Srijan Biswas	171000048	E	Dissertation
53		Abhishek Singh Gaur	198410008		Research Project
54		Abhishek Tiwari	198410009	Digital Marketing: Effective & Efficient Use Of Digital Marketing Channels In Business	Research Project
55		Adit Ajmera	198410012		Research Project
56		Akash Kumar Singh	198410017	Digital Marketing: Effective & Efficient Use Of Digital Marketing Channels In Business	Research Project
57	Institute of Business Management	Ankit Kumar	198410043	Digital Marketing: Effective & Efficient Use Of Digital Marketing Channels In Business	Research Project
58		Ashish Kumar	198410064	Impact Of Covid-19 Pandemic On Future Invest	Research Project
59		Bandna Agrawal	198410070	Plan In India	Research Project
60		Chetan Gautam	198410074	rian in muia	Research Project
61		Abhishek Chauhan	208410002	Marketing Strategies With Special Reference To Scorpio at Mahindra & Mahindra Limited, Mumbai	Summer Internship
62		Krishankant Pandey	208410100	Comparative Analysis Of Logistics Services art Om Logistics	Summer Internship

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project
63		Jyoti	2044000039	Health and Hygiene	Mini Project
64		Pankaj Dixit	2044000060	Life Style Disorders	Mini Project
65		Anurag Gupta	2044000020	Importance of Girls Education	Mini Project
66	Institute of	Amit Kumar	2044000013	Life Style Disorders	Mini Project
67	Pharmacutical	Bhuvnesh Rawat	2044000025	Vaccination and Immunization	Mini Project
68		Rashmi Sharma	1944000071	Balanced Diet for Healthy Life	Mini Project
69	Research	Sourabh	1744000076	Ragular Excercise	Mini Project
70		Rahul Maurya	2044000068	Sanitization and Health	Mini Project
71		Vishal Singh	1944000091	Regular Excercise	Mini Project
72		Vishal Babu	1744000068	Breast Cancer	Mini Project
73		Aditi Tripathi	204300001	Role of Biotechnology in Medicinal Plants.	Mini Project
74		Amit Kumar	204300002	Hepatitis and it's treatment.	Mini Project
75		Amita Kumari	204300003	Medicinal antibacterial agents.	Mini Project
76		Ankita Shrivastav	204300004	Artificial intelligence & it's applications in biotechnology.	Mini Project
77		Ananya Mishra	198430002	Isolation of endophytes from different plants parts of Bacopa monnieri & their effect on Bacoside A comtent	Major Project
78	Department of Biotechnology	Anjali Sharma	198430003	Comparison of second line-line probe assay (SL-LPA) and liquid culture drug susceptibility testing of second line anti-TB drugs using MGIT-960 from patients referred from western Uttar Pradesh.	Major Project
79		Deepanker Singh	198430004	Production of plasma proteins	Major Project
80		Divyansh Sharma	198430005	"Drug susceptibility / Resistance Profile Of Linezolod for Pre-Extensively and Extensively Drug Resistance Tuberculosis"	Major Project
81		Komal Singh	198430006	Cultivation of mushroom using different substrate and antimicrobial activity	Major Project
82		Mansi Gupta	198430007	Drug resistance pattern in M.leprae isolates from leprosy patients attending tertiary care centers in Delhi	Major Project

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project
83		Aarti Singh	197000001	Problem of poor vocabulary Skill in English	Mini Project
84		Abha Singh	197000002	Vidhyarthiyo dwara grih kary na karke lana	Mini Project
85		Akanksha Gautam	197000004	Low marks due to poor handwriting	Mini Project
86		Akhilesh Kumar Saraswsat	197000005	Wash Room and Drinking water place cleanliness problem	Mini Project
87	Faculty of	Alok Kumar	197000006	unorganise Laboratory	Mini Project
88	Education	Amit Yadav	197000007	chhatro dwara ki jane wali hindi vishay me vartani sambandhi ashuddhiya	Mini Project
89		Anju Sisodia	197000008	problem of computer subject is very low	Mini Project
90		Anshuman Singh Yadav	197000009	spelling mistakes of students in their notebook	Mini Project
91		Antima Singkh	197000010	shortage attendance of students	Mini Project
92		Archna Chaudhary	197000011	Problem of involvement of under confident student in school activities and program	Mini Project
93		Aashutosh Kumar	197011003	Channelization of Agro-technology to the farmers	Micro Project
94		Rakesh Tiwari	197011067	water resource in India	Micro Project
95		Aashi Sharma	197011002	Nano fertilizer in agriculture	Micro Project
96		Muskan Sharma	197011050	Salinity stress as a challenge in agro-ecosystem	Micro Project
97		Devendra Singh	197011025	Agro-chemicals and its impact on agro-ecosystem	Micro Project
98	Faculty of Agricultural	Ganesh Upadhyay	197011029	Cropping pattern in different agro-climatic zones in India	Micro Project
99	Sciences	Rakesh Tiwari	197011067	water resource in India	Micro Project
100		Sweta Kumari	197011096	Bio-fortification in agriculture towards nutritional security	Micro Project
101		Shivchand Shahni	197011087	Contribution of dryland agriculture in Indian Economy	Micro Project
102		Gaurav Raj	197011031	Climate change impact on seasonal weather status	Micro Project
103		Tushar Dixit	185110017	Rights of Arrested Person	Moot
104		Ishan Dixit	185100004	rights of Affested Letson	Court/Research
105		Kushal Mittal	185100006	Information in Cognizable Offence	Moot
106	Institute of Legal	Ankit Saraswat	185100001	information in Cognization Officiace	Court/Research
107	Studies and	Raashish Rana	185110011	Rights of a Private Person to Arrest	Moot
108	Dosoorah	Muskan Sharma	185110008	ragins of a fireact cison to futest	Court/Research

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project
109	Research	Sakshi Sharma	195110026	Equal Pay for Equal Work	Social Project
110		Avinsash Sharma	195110011	Factories Act 1948: A Critical Analysis	Social Project
111		Vishakha Jha	195100016	Occupational Safety with reference to Factories Act 1948	Social Project
112		Omnarayan Agrawal	195010007	Preparation of copper ferrite nanoparticles using extract of eucalyptus plant leaves	Dissertation
113		Anubha Yadav	195010002	A green approach towards synthesis and characterization of carbon dots from tinospora cordifolia	Dissertation
114		Deepak Saini	195010003	Synthesis structure and catalytic permormance of N4 microcycles of Fe(III) and Co(II) for oxidation of hydroquinone	Dissertation
115		Swapnil Yadav	195010011	Synthesis of metal oxide nanoparticles and their catalytic activities	Dissertation
116	Department of Chemistry	Umesh Kumari	195010012	Synthesis of nanoparticles and their applications in removal of dyes in waste water	Dissertation
117		Madhav Krishn Goswami	195010005	Preparation of copper ferrite nanoparticles using swertia leaf extract	Dissertation
118		Shivani Jadon	187010017	A Simple and senstive kinetic inhibitory method for acetylcysteine determination	Project
119		Neeraj Kumari	195010006	Synthesis of different nanoparticles and their applications in agriculture	Dissertation
120		Muskan Thakur	207010019	Quantitative study of ferrous ion content in given water sample	Project
121		Roopam Pandey	207010027	Quantative analysis of potassium dichromate by titrametric method	Project
122		Arnika Sharma	195020001	Collective Modes of Plasma	Dissertation
123		Ashwani Yadav	195020002	Effects of VLF electric field emissions associates with shallow major earthquakes occurred in indian	Dissertation
124		Babita Kumari	195020003	Nano-materials: Properties and its Applications	Dissertation
125		Kajal	195020004	One Dimensional Photonic Structures	Dissertation
126	TD 4 4 6	Prerna	195020005	Double Beta Decay	Dissertation
127	Department of	Saurabh Kumar	195020006	Black hole solution and its properties	Dissertation

S. No.	Department	Name of the Student	University Roll No.	Name of the Project	Nature of Project	
128	Physics	Bhavna	205020001	The principle of off-axis neutrino beam, pros and cons in comparison Mini Proto on-axis neutrino beam		
129		Chanchal Singh	205020002	Study on Black Holes	Mini Project	
130		Muskan Saxena	205020004	Study on Elementary Particles	Mini Project	
131		Riya	205020005	Issues and Limitations of Neutrino Energy Reconstruction	Mini Project	



Learning through Computer simulations

S. No	Courses	Simulation Tool/Package Used
1	Engineering Drawing	AUTOCAD
2	Machine Drawing	AUTOCAD
3	CAD/ CAM	CREO
4	Machine Design	ANSYS
5	Computational Fluid dynamics/ Fluid Mechanics	FLUENT
6	Thermodynamics	Fusion 360
7	Engineering Graphics Laboratory	Bentley Auto CAD
8	Structural Detailing Laboratory	Bentley Auto CAD
9	CAD Laboratory	Bentley Staad Pro
10	Traffic Engineering Laboratory	Bentley CUBE Base
11	Geosynthetics Testing Laboratory	Bentley PLAXIS 3D LE
12	Computer Aided Transportation Engineering Laboratory	PTV VISSIM
13	Advance CAD Lab	ANSYS
14	Electronics Lab-I	LTspice
15	Digital Electronics Lab	LTspice
16	Microprocessor Lab	8085 Simulator
17	Control system Lab	MATLAB
18	Communication Engineering Lab	MATLAB
19	Digital Communication Lab	MATLAB
20	Digital Signal Processing Lab	ccstudio
21	Simulation Lab-II	Labview
22	Multicarrier Communication Lab	MATLAB
23	Digital Image Processing Lab	MATLAB
24	Bio-Medical Signal Processing Lab	MATLAB
25	Speech Processing Lab	MATLAB
26	Digital System Design using HDL LAB	Xilinx
27	RF Integrated Circuits Lab	Advanced Design System (ADS)
28	Embedded Systems Lab	ccstudio
29	Industrial Process Control Lab	Labview
30	PLC & SCADA	STUDIO 5000
31	Intelligent Techniques In Electrical Engineering	MATLAB
32	Computer Aided Power system analysis	MATLAB
33	Electrical Simulation Lab	PSpice/MATLAB
34	Advanced Simulation Lab	MATLAB



New Gen Innovation and Entrepreneurship Development Centre (IEDC)

NewGen IEDC GLAU









INNOVATION BOOKLET











CHANCELLOR'S MESSAGE



Honourable Chancellor
SHRI NARAYAN DAS AGRAWAL

"The current position of the company, future plans, events, facilities can be easily described here."

Newsletters are published by clubs, churches, societies, associations, and businesses— especially companies—to provide information of interest to members, customers, or employees.

CHIEF PATRON'S MESSAGE



Dean Academic Affairs- GLA UNIVERSITY
Prof. Anoop Kumar Gupta

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ABOUT GLA UNIVERSITY

GLA University, Mathura was established through the U.P. State Legislative Act of 2009 (UP Act 21 of 2010). The University is named after Shri Ganeshi Lal Agarwal Ji, father of Shri Narayan Das Agrawal who took the first step toward fulfilling his father's dream. The University is duly recognized by UGC under Section 2(f). GLA University, Mathura which is a member of the Association of Indian Universities(AIU) is blissfully located about 125 Km from New Delhi on the NH-2 to Agra, at Mathura, the birthplace of Lord Krishna.

Today, GLA University, Mathura is one of the leading private Universities that has been accredited "A" grade by the National Assessment and Accreditation Council (NAAC) and has 12B status from UGC. The eco-friendly sprawling campus is spread over more than 110 acres of land, and I come to 12000+ students, more than 50 well qualified and experienced faculty members and 700+ dedicated staff.

Highlights

- Establishment
- Recognition
- Endorsements
- · About Campus
- · Alumni Network
- · Courses offered
- · Placements

With a 23000+ strong Alumni network all over the world, the University enjoys a special integration with the corporate world, that helps it develop industry required courses and curriculum. The University likes to compete with itself and is committed to providing its students with a world-class education at affordable prices. The University through its Undergraduate and Post-graduate departments offers a large number of academic programs from Diploma to PhD in Humanities, Applied Sciences, Education, Engineering, Management, Pharmacy, Law and Biotechnology.

Our students are getting excellent placements. We are proud that on average over the last so many years we are able to place nearly 74 students through on-campus recruitment itself. Many prestigious companies, like Infosys, Wipro, TCS, HCL, Jindal Steel, Vivo, Bosch, Honda Motors and Scooters, Amaron, Amazon, Hindustan Glass, Padmini, IDBI, HDFC, Tech Mahindra and many more are delighted to hire our students



CEO'S MESSAGE



Mr. NEERAJ AGRAWAL
CHIEF EXECUTIVE OFFICER- GLA UNIVERSITY

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EXECUTIVE COUNCIL'S MESSAGE



Mr. VIVEK AGRAWAL
MEMBER EXECUTIVE COUNCIL

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CHIEF CO-ORDINATOR'S MESSAGE



Dr. MANOJ KUMAR CHIEF CO-ORDINATOR IEDC

"At New Gen IEDC, we invigorate ideas and innovation."

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ABOUT NEW GEN IEDC



New Generation Innovation and Entrepreneurship Development Centre (NewGen IEDC) is a programme launched by the National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology (DST), Government of India.

NewGen IEDC will aim to inculcate the spirit of innovation and entrepreneurship amongst the young S&T students and encourage and support start-up creation through guidance, mentorship and support.

The NewGen Innovation and Entrepreneurship Development Centres are being promoted in educational institutions to develop institutional mechanisms to create entrepreneurial culture in S&T academic institutions and to foster techno-entrepreneurship for the generation of wealth and employment by S&T persons. The NewGen IEDCs are established in academic institutions (science colleges, engineering colleges, universities, management institutes) having requisite expertise and infrastructure.

NewGen IEDC in GLA focuses on the entrepreneurial development of students with innovative minds.

Any new idea has the potential to fill a market gap and fill the needs of consumers. We promote these innovative ideas and give full support to convert them into successful startups.

WHY ARE WE DIFFERENT?

We thrive to become, by 2025, a vibrant hub of entrepreneurial activity in the North Indian region, such that local entrepreneurs drawn from students, faculty, staff and other local communities are able to incubate, nurture and grow business ideas into full-fledged companies with a significant market presence. Our goal is to have at least 100 companies graduate from the GLAU E-Cell Incubator by 2025.

GLAU NewGen IEDC would also spread the message of entrepreneurship and create a culture of entrepreneurship in the Institution. With faculty already trained in various nuances of entrepreneurship, the presence of NewGen IEDC at GLA University would create a vibrant entrepreneurial culture amongst the students. Many amongst the "Job-Seekers" would be converted into "Job-Creators" through the entrepreneurial route.

With a vision to catalyze and promote development of knowledge-based and innovation-driven enterprises and promote employment opportunities amongst youth, especially students.

ABOUT E-CELL

E-Cell GLAU elaborated as Entrepreneurship cell is a non-profit, strategically innovated, value driven organization with prime focus on impacting young minds and is run by entrepreneurs in making.E-Cell aims at developing entrepreneurial spirit among students and shares a vision to foster innovation and budding ideas in youths.



Entrepreneurship Cell, GLA University is a non-profit, strategically innovated, value-driven organization with a prime focus on impacting young minds and is run by the student entrepreneurs in making.

We host various workshops, interactive activities, speaker sessions, and competitions for aspiring entrepreneurs and support them by providing the necessary resources to help them turn their ideas into start-ups.

ABOUT IIC

Under the Ministry of Education's Innovation Cell, GLA University has established Institution's Innovation Council in the year 2018-19 and has actively participated in IIC3.0 (the academic year 2020-21). IIC-GLA University works closely with E-Cell of GLA University which is the student-driven body.



IIC-GLA University got a 1-Star rating for 2019-20 and a 3.5-Star rating for 2020-21. Following are the Star Rating certificate for the year 2019-20 and 2020-21. In the academic year 2020-21, IIC-GLAU has organized 20+ activities under IIC which include workshops on Design Thinking, IPR, Idea Generation & many others. Two members of IIC-GLA University, Dr Manoj Kumar & Mr Ravikumar Tiwari have received a certificate for completing the training of Innovation Ambassador (IA).

ABOUT ARIIA

GLA University has also participated in the ARIIA -2021 Ranking (Atal Ranking of Institutions on Innovation Achievements) and secured band-excellent in the category of Private/Self-financed University for the latest ARIIA-2021 ranking announced by the Ministry of Education (MoE), Govt.



Atal Ranking of Institutions on Innovation Achievements (ARIIA) is an initiative of the Ministry of Education (MoE), Govt. of India to systematically rank all major higher educational institutions and universities in India on indicators related to "Innovation and Entrepreneurship Development" amongst students and faculties. ARIIA rank band excellent is after the top 10 ranks and only 36 private universities have been given this band. GLA University is amongst the only 5 universities from Uttar Pradesh to feature in the top 46 universities across India in the ARIIA-2021 ranking.

ABOUT TBI

"WHERE IDEA GETS TRANSLATED INTO A REALITY"

Technology Business Incubator has been set up in the premises of GLA University under the sponsorship of the Department of Information Technology & Electronics Government of Uttar Pradesh. Technology business incubators are a powerful economic development tool, which promotes growth through innovation.

TBI-GLAU

Technology Business Incubator

The application of technology supports economic development strategies for small business development, and encourages growth from within local economies, while also providing a mechanism for technology transfer. The Technology Business Incubator StartUp LaunchPad, GLAU would primarily focus on those technologies, which need support for commercialization and further proliferation. These can act as a growth driver in the low-end spectrum of the incubation ecosystem. The components under the program will include mentoring support in business and technology plans, networking of business resources, entrepreneurship cum skill development, identification of appropriate technology, hands-on experience on Projects, Projects/ Products selection, project report preparation, credit facilitation, seed capital assistance, marketing assistance, professional assistance to make the enterprise successful and achieve higher growth.

Technology-based new enterprises are typically characterized as high risk and high growth ventures, and as such, they require an enabling environment like TBI to enhance the prospects of success.

GLA University, Mathura in February 2021 got sanctioned letter from the Department of IT & Electronics, Government of Uttar Pradesh (Start-in UP Initiative) to establish Technology Business Incubation Center at the GLA University campus. The proposed TBI at GLAU be sector agnostic & will focus on the following sectors: AgriTech, Green Technology, Ind (Robotics & IoT) & SaaS (Software as a Service)



VISION: The prime role of TBI-StartUp Launchpad, GLAU is nurturing and empowering innovation and entrepreneurship in the state of Uttar Pradesh. TBI Startup Launchpad, GLAU is committed to nurturing technology and knowledge-based ventures through its start-up journey by providing the necessary support to help entrepreneurs survive in the valley of death in the life cycle of a startup and reach a stage where they can scale up their ventures further.

MISSION: TBI- StartUp Launchpad, GLAU aims to build and share resources including space and infrastructure, access to business support services, mentoring, training programs to enhance the skills of entrepreneurs and seed funds. The scope of support is broad-based, and covers technologies/IP developed wholly at the Institute or partly through collaborations elsewhere, as well as external startups with which GLAU members are associated as consultants or mentors.



ABOUT STARTUP LAUNCHPAD

StartUp LaunchPad was established at GLA University, Mathura on 24th April 2019 with the aim of encouraging students to start their own ventures. To date, 18 Start-up have graduated from Start-up Launchpad and 4 Startups are presently receiving incubation.



StartUp LaunchPad provides various facilities to all the incubates:

- . Dedicated Office Space accessible from 12 is in midnight.
- Basic Incubator Facilities: Wi-Fi Access for all the team members, Conference Hall, CCTV security, Printer & Centrally Air-Conditioned room.
- Mentoring Support: Around 4-6 mentoring sessions in a month.
- Networking Support: Visit different Startup expos, incubation centres etc. & networking opportunities at GLA (With Guest Speakers)
- Documentation Preparation Help (Includes Pitch Desk, Financial Planning, Vission Mission Statement, Project & Task Management Tools, SOP & other required documents)
- · Help in Promotion
- · Assistance in seed funding support

Currently, 21 different teams are working on different startups, out of these 12 are Physical Startups and 09 are working in virtual mode.

5.No	Name of Startup	Name of Promoter/CEO	Mobile No.	Mall ID	Product/ Service	ľ
1	Iredmolen E-Cycle PVt. Ltd	Sachin Serigar	9456081057	tredecycle@gmail.com	Product	
2	Foodwagon PVt Ltd	Rajdecp Gautam	6396347034	rajdospgautamiži (Egmall.com	Freduct	
9	Installed a Policy	Swhin Sold a 5 Stice	7070287840	Sachinesoubla colleggmelloom	Service	
40	FRISI	Arindya Singh	9807/07070	anindya.singh@outlook.com	Senfee	
6.	Mt Voic	Prince Grane	8176842081	nholt,comecggmal.com	Product	
0	Incognimous	Anmai K.Sachan	/30/11/0/3	Into@incognimous.com	Sentes	
7	Cytrer Importors	Saume Namanii, Sakaham	70905-0290	soumi raman@gmail.com	Senfer	
8	Heption	Atul Meurox	9667018788	infraghestistucom	Senior .	
9	Harchard Sando	Sachin Kumar	7665201163	merchantsahab@gmail.com	Service	
10	Ambrick Music	Ritio Striventus	6800399533	theimbrickmusic@enell.com	Service	
11	Tacvis Charge to YourStartup	Deepak Assachi	7995113279	yourstamupdotinggrafi.com	Senice	
12	Burses	Namen Bhaltneger	9620396595	nochranathalnspr@gnal.com	Sensor	
13	The vite*	Shalini Sharma	7388092405	sheliri.shame1995@gmail.com	Service	
14	Siction/Sondor	An garti Agraval	7899906998	angrahagansal oc17gglaucin	Service	
15	Acadicamer	Kristanu-Garg	01459303929660192307	krashanugang@gniall.com	Service	
16	Sevind	Proking Single	7011500242	prolition singlet fit filterations	Service	
17	HODE CAR	Sumt Kamar	82/3/1504/	gautameuniti/10@gnall.com	Service	
231	Creed MGT	Horsh Shorma	7300735711	harshahama_cc17@gla.ac.lh	Strifes	
19	Technoid	Harshit Jaintol	7454922235	mos/ierost/201/gameil.com		
20	Fines	Harsh Sharma	7300735711	harshshama_cs17@glaac.in	Service	
21	Legis/24by7	Prince Agraval	6791814616	Legal24ts/7@amail.com		

SOME OF OUR **PROJECTS**



SMART E-CYCLE +STAND

An Electric cycle made smart by adding auto-lock with an inbuilt camera and RFID card access for (Public Bike Sharing). Differently-abled students or aged staff members can use the facility for ease of mobility and end to end commute.



F-WRITER

Many trees are cut down day by day for the production of papers.

The aim is to make a pad, like the size of a laptop, in which a screen, a camera, and a mini-computer will be available. The students who can't afford laptops can buy them at low prices.



SIMMER BUTTER GHEE SEPARATOR

A prototype that involves mixing, heating and separation steps together in single apparatus for obtaining Ghee from malai.

The final product does not contain a foul smell of buttermilk due to proper heating and filtration.



KAVACH (कवच) ANTI **COVID-19 PENDANT**

Anti COVID-19 Pendant 3D printed portable device that pulses or vibrates when a person's hand comes close to their face.

The sensor will also vibrate or alert you if you're too close to someone because sometimes we often forget to maintain social distance.



GRASS ROOF PLANTATION HUB

The GRPH, project is all about resolving this problem by providing the beauty of nature at their doorstep by introducing the Grass Roof Plantation system helps you to maintain your healthy life as well as your emotional state of life.

The basic body starts with covering the waterproof layer of the membrane on the roof surface.



BILIRUBIOMETER

It will detect the level of bilirubin in blood serum, 19% to 25% of all maternal deaths and 7% to 13% of all neonatal deaths in Bangladesh were associated with jaundice in pregnant women and 58% of deaths in pregnant women with acute liver disease.

OUR ACHIEVEMENT CERTIFICATES



Some of our achievements in innovation and entrepreneurship development, which includes recognition and EXCELLENT-band ranking in ARIIA (Atal Ranking of Institutions on Innovation Achievements).members of IIC-GLA University, Dr Manoj Kumar & Mr Ravikumar Tiwari has received certificate for completing training Innovation Ambassador (IA).





PHOTO GALLERY

















NewGen IEDC GLAU

(Promoted by NSTEDB, DST, Govt of India, New Delhi | Hosted by: GLA University, Mathura)









To catalyze and promote development VIRA of knowledge-based and innovationdriven enterprises and promote employment opportunities amongst youth specially students

NewGen IEDC MISSION

Develop and promote entrepreneurship through multidimensional technical skills in order to enrich the inclusive growth and overall development











