

**Integrated Postgraduate in Business Administration (B.Tech. in IT + MBA) (227 credits)**

SEMESTER -1	Sl no	Course Code	Subjects	Credits	L-T-P
	1	EE101	Fundamentals of Electrical and Electronics	4	3-0-2
	2	ES101	Engineering Physics	4	3-0-2
	3	ES102	Engineering Mathematics	4	3-1-0
	4	EE102	Engineering Design Principles	3	2-0-2
	5	IT101	Principles of Computer Programming	4	3-0-2
	6	HS101	Freshman Skills	2	2-0-0
	7	HS102	Sports and Physical Education	2	0-1-2
	<b>Total</b>			<b>23 Credits</b>	

SEMESTER -2	Sl no	Course Code	Subjects	Credits	L-T-P
	1	EE103	Digital Electronics	4	3-0-2
	2	ES103	Probability and Statistics	4	3-1-0
	3	IT102	Data Structures	4	3-0-2
	4	EE104	Hardware Workshop	3	1-0-4
	5	IT103	Object Oriented Programming	4	3-0-2
	6	HS103	Ecology and Environment Sciences	2	2-0-0
	7	CS104	Mobile Application Technologies	2	0-1-2
	<b>Total</b>			<b>23 Credits</b>	
		MO101	MOOC-1 (Optional in summer)	2/3-0-0	

EXIT AFTER YEAR - 1

**Certificate in Engineering Sciences (46 credits)**

SEMESTER -3	Sl no	Course Code	Subjects	Credits	L-T-P
	1	HS201	Indian Culture, Ethics and Moral Values	2	2-0-0
	2	IT201	Discrete Structures	4	3-1-0
	3	IT202	Computer Organization and Architecture	4	3-0-2
	4	IT203	Design and Analysis of Algorithms	4	3-0-2
	5	IT204	Data Communications	4	3-0-2
	6	IT205	Database Systems	4	3-0-2
	<b>Total</b>			<b>22 credits</b>	

SEMESTER -4	Sl no	Course Code	Subjects	Credits	L-T-P
	1	MS619	Entrepreneurship and Innovation	2	2-0-0
	2	IT206	Theory of Computation	3	3-0-0
	3	IT207	Operating Systems	4	3-0-2
	4	IT208	Computer Networks	4	3-0-2
	5	EE201	Signals and Systems	4	3-1-0
	6	IT209	Graph Theory	4	3-0-2
	<b>Total</b>			<b>21 credits</b>	
		MO201	MOOC-2 (Optional in summer)	2/3-0-0	

EXIT AFTER YEAR - 2

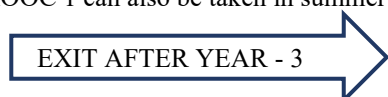
**Diploma in Information Technology (89 credits)**

SEMESTER -5	Sl no	Course Code	Subjects	Credits	L-T-P
	1	MS603	Business Economics	3	3-0-0
	2		Multidisciplinary/Open Elective- 1	3	3-0-0
	3	IT308	Nature Inspired Computing	3	3-0-0
	4	IT302	Compiler Design	4	3-0-2
	5	IT303	Computer Graphics	4	3-0-2
	6	IT304	Trustworthy Artificial Intelligence	4	3-0-2
			<b>Total</b>	<b>21 credits</b>	

SEMESTER -6	Sl no	Course Code	Subjects	Credits	L-T-P
	1	EN301	Art of Engineering Research	2	2-0-0
	2		Multidisciplinary/Open Elective- 2/MOOC 1 <sup>§</sup>	3	3-0-0
	3	IT0XX	Department Elective-1	3	3-0-0
	4	IT309	Game Theory	3	3-0-0
	5	IT306	Machine Learning	4	3-0-2
	6	IT307	Wireless Communication Technologies	4	3-0-2
			<b>Total</b>	<b>19 credits</b>	

BTech Project allocation to be done during 6<sup>th</sup> Semester

<sup>§</sup> MOOC 1 can also be taken in summer after 2<sup>nd</sup> semester if the student wishes to finish it earlier.



**B.Sc. in Information Technology (129 credits)**

<sup>§</sup> MOOC 2 can also be taken in summer after 4<sup>th</sup> semester if the student wishes to finish it earlier Colloquium of 3 credits in summer semester (MOOC, NPTEL etc. in place of colloquium)

SEMESTER - 7	Sl no.	Course Code	Subject	Credits	L-T-P
	1	MS601	Principles and Practices of Management	3	3-0-0
	2	MS604	Business and Legal Environment	3	3-0-0
	3	MS605	Financial Reporting and Control	3	3-0-0
	4	MS606	Organizational Behavior	3	3-0-0
	5	MS607	IoT and Big Data Management	3	2-0-2
	6	MS617	Business Data Mining	3	2-0-2
	7	IT404	Software Engineering	4	3-0-2
	8	MS0XX	<b>Department Elective-I</b>	<b>3</b>	<b>3-0-0</b>
	9	MS399	BTech Summer Project	6	0-0-12
			<b>Total</b>	<b>31 Credits</b>	

SEMESTER - 8	Sl no.	Code	Title of the Course	Credits	L-T-P
	1	MS610	Operations Management	3	3-0-0
	2	MS611	Marketing Management	3	3-0-0
	3	MS612	Financial Engineering and Management	3	3-0-0
	4	MS613	Business Research Methods	3	3-0-0
	5	MS622	Cloud Computing and Services	3	2-0-2
	6	MS0XX	<b>Department Elective-II</b>	<b>3</b>	<b>3-0-0</b>
	7		Multidisciplinary/Open elective/ MOOC-1	3	3-0-0
	8	MS596	Mini project	3	0-0-6
			<b>Total</b>	<b>24 Credits</b>	

Colloquium of 4 credits in summer semester (MOOC, NPTEL etc. in place of colloquium)

**ABRUPT EXIT AFTER 4 YEARS**

**B.Sc. in Information Technology (IT) + One year Diploma in Management (184 credits)**

SEMESTER - 9	Sl no.	Course Code	Title of the Course	Credits	L-T-P
	1	MS618	Strategic Management	3	3-0-0
	2	MS620	Business Process Management	3	3-0-0
	3	MS621	Business Ethics and Sustainability	3	3-0-0
	4	MS0XX	<b>Department Elective-III</b>	3	3-0-0
	5	MS0XX	<b>Department Elective-IV</b>	3	3-0-0
	6		Multidisciplinary/Open elective/ MOOC-2	3	3-0-0
		MS597	Colloquium (Based on industrial training)/MOOC	4	0-0-8
	7	MS598	Major Thesis Part- 1	6	0-0-12
			<b>Total</b>	<b>28 Credits</b>	

**SEMESTER - 10**

Sl no.	Course Code	Title of the Course	Credits	L-T-P
1		Multidisciplinary/Open elective/ MOOC-3	3	3-0-0
2	MS599	Major Thesis Part- 2	12	0-0-24
		<b>Total</b>	<b>15 Credits</b>	

**FINAL EXIT AFTER 5 YEARS**

**B.Tech. in Information Technology + MBA (227 credits)**

#### List of electives proposed to be offered in Odd and Even Semesters

##### Specialization Basket 01: Information Technology and Systems

Sl no.	Course Code	Subject	L-T-P	Credits	Semester
1	MS001	Digital Production System	3-0-0	3	Odd
2	MS002	IT Products and Intellectual Property Rights	3-0-0	3	Even
3	MS003	Management of Digital Technologies	3-0-0	3	Odd
4	MS004	Knowledge Management	3-0-0	3	Even
5	MS005	Service-Oriented Computing	3-0-0	3	Odd
6	MS006	Social Networks Analytics	3-0-0	3	Even
7	MS007	Software Project Management	3-0-0	3	Odd
8	MS008	Software Quality Management	3-0-0	3	Even
9	MS009	Programming for Business Intelligence	3-0-0	3	Odd
10	MS010	Strategic Planning of Information Systems	3-0-0	3	Even

##### Specialization Basket 02: Technology and Operations Management

Sl no.	Course Code	Subject	L-T-P	Credits	Semester
1	MS011	Business Systems Simulation	3-0-0	3	Odd
2	MS012	Service Operations Management	3-0-0	3	Even
3	MS013	Sustainable Supply Chain Management	3-0-0	3	Odd
4	MS014	Technology Management	3-0-0	3	Even
5	MS015	Technology and Operations Strategy	3-0-0	3	Odd

6	MS016	Total Quality Management	3-0-0	3	Even
7	MS017	World Class Production Systems	3-0-0	3	Odd
8	MS018	Emerging Areas in Technology and Operations	3-0-0	3	Even
9	MS019	New Products and Services Development	3-0-0	3	Odd
10	MS020	Project Management	3-0-0	3	Even

#### **Specialization Basket 03: Human Resource Management**

Sl no.	Course Code	Subject	L-T-P	Credits	Semester
1	MS021	Compensation Management	3-0-0	3	Odd
2	MS022	Change Management	3-0-0	3	Even
3	MS023	Corporate Social Responsibility	3-0-0	3	Odd
4	MS024	Competency Management	3-0-0	3	Even
5	MS025	Human Resource Information System	3-0-0	3	Odd
6	MS026	Emerging Areas in Human Resource	3-0-0	3	Even
7	MS027	Organization Theory and Development	3-0-0	3	Odd
8	MS028	Leadership and Talent Management	3-0-0	3	Even
9	MS029	Training and Development	3-0-0	3	Odd
10	MS030	Management of Employee Relations	3-0-0	3	Even

#### **Specialization Basket 04: Finance**

Sl no.	Course Code	Subject	L-T-P	Credits	Semester
1	MS031	Corporate Restructuring	3-0-0	3	Odd
2	MS032	Corporate Tax Planning	3-0-0	3	Even
3	MS033	Economic and Financial Modeling	3-0-0	3	Odd
4	MS034	Entrepreneurial Finance	3-0-0	3	Even
5	MS035	Management of Financial Services	3-0-0	3	Odd
6	MS036	Financial Risk management	3-0-0	3	Even
7	MS037	Personal Wealth Management	3-0-0	3	Odd
8	MS038	International Finance	3-0-0	3	Even
9	MS039	Project Appraisal and Finance	3-0-0	3	Odd
10	MS040	Security Analysis and Portfolio Management	3-0-0	3	Even

#### **Specialization Basket 05: Marketing Management**

Sl no.	Code	Subject	L-T-P	Credits	Semester
1	MS041	Consumer Behavior	3-0-0	3	Odd
2	MS042	Advertisement and Sales Promotion	3-0-0	3	Even
3	MS043	Product and Brand Management	3-0-0	3	Odd
4	MS044	E-marketing	3-0-0	3	Even
5	MS045	Retail Management	3-0-0	3	Odd
6	MS046	International Marketing	3-0-0	3	Even
7	MS047	Sales and Distribution	3-0-0	3	Odd
8	MS048	Marketing Research	3-0-0	3	Even
9	MS049	Service Marketing	3-0-0	3	Odd
10	MS050	Strategic Marketing	3-0-0	3	Even

**Specialization Basket 06: Management of Social Sector**

Sl no.	Code	Subject	L-T-P	Credits	Semester
1	MS051	Public Policy and Processes	3-0-0	3	Odd
2	MS052	Public Private Partnerships	3-0-0	3	Even
3	MS053	Sustainable Development	3-0-0	3	Odd
4	MS054	Management of Rural and Social Sector	3-0-0	3	Even
5	MS055	Information Technology Enabled Services	3-0-0	3	Odd
6	MS056	Management of Non-Formal Organization	3-0-0	3	Even
7	MS057	Healthcare System Management	3-0-0	3	Odd
8	MS058	Emerging Areas in Management of Social Sector	3-0-0	3	Even
9	MS059	Infrastructure Management	3-0-0	3	Even

**List of Core courses for Minor in Management**

Sl	Code	Title of the Course	L-T-P	Credits	Semester
1	MS601	Principles and Practices of Management	3-0-0	3	Odd
2	MS605	Financial Reporting and Control	3-0-0	3	Odd
3	MS606	Organizational Behavior	3-0-0	3	Odd
4	MS607	IoT and Big Data Management	2-0-2	3	Odd
5	MS617	Business Data Mining	3-0-0	3	Odd
6	MS610	Operations Management	3-0-0	3	Even
7	MS611	Marketing Management	3-0-0	3	Even
8	MS612	Financial Engineering and Management	3-0-0	3	Even
9	MS613	Business Research Methods	3-0-0	3	Even
10	MS622	Cloud Computing	3-0-0	3	Even

**List of Elective courses for Minor in Management**

S. No	Course	Title of the Course	L-T-P	Credits	Semester
1	MS001	Digital Production System	3-0-0	3	Odd
2	MS006	Social Networks Analytics	3-0-0	3	Even
3	MS013	Sustainable Supply Chain Management	3-0-0	3	Odd
4	MS012	Service Operations Management	3-0-0	3	Even
5	MS028	Leadership and Talent Management	3-0-0	3	Odd
6	MS022	Change Management	3-0-0	3	Even
7	MS035	Management of Financial Services	3-0-0	3	Odd
8	MS040	Security Analysis and Portfolio Mgt.	3-0-0	3	Even
9	MS049	Service Marketing	3-0-0	3	Odd
10	MS048	Marketing Research	3-0-0	3	Even