Undergraduate Programs

Section Contents

Liberal Arts and Sciences Courses

Liberal Arts and Sciences provides students with the general education foundation essential to success in their core courses. The arts and sciences areas of study include psychology, mathematics, humanities, science, and English. These courses improve critical and analytical thinking skills, enhance knowledge of the community, teach skills in conducting research, and expand knowledge beyond a student's program. These skills are crucial to student development and key qualities for employment in high-demand work environments. Academic advisors may waive prerequisites, when necessary, at their discretion. Electives may be substituted on a case-by-case basis with the approval of the academic advisor.

Liberal Arts and Sciences Courses

Number	Course Name	Credits
Communication		
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
Humanities		
HUM101	Critical and Creative Thinking Skills	4.5
PCC103	Harvard Certification- Ethics at Work	0.5
Mathematics		
MTH201	Business Mathematics	4.5
MTH202	Discrete Mathematics	4.5
MTH203	Calculus and Algebra	4.5
Philosophy		
PHL201	Indian Ethos and Mindful Leadership	4.5
PCC101	Skills for Lifelong Learning	0.5
Psychology		
PSY202	The Science of Happiness	4.5
PCC104	Positive Intelligence	0.5
Sciences		
PCC102	Environmental Science: Corporate Sustainability	0.5

School of Business Administration

Bachelor of Business Administration (BBA)

The mission of the Bachelor of Business Administration program is to allow students to build on a core of knowledge. The primary goal of the bachelor's program is to prepare students for the dynamic, changing realities of today's business environment.

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
13 Core courses x 4.5 credit hours	= 58.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours
4 Common courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 13 courses)

Number	**Course Name**	**Credits**
ACC101	Financial Accounting	4.5
ACC201	Cost and Managerial Accounting	4.5
ECO101	Business Economics	4.5
HRM201	Human Resource Management	4.5
FIN301	Financial Management I	4.5
LAW101	Business Law	4.5

MGT101	Introduction to Business	4.5
MGT201	International Business	4.5
HRM202	Organizational Theory and Behaviour	4.5
MKT101	Sales and Marketing	4.5
OPS201	Production and Operations Management	4.5
MGT203	Design Thinking	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC201	Management Information Systems	4.5
Total Core Requirements		**58.5**
Open Electives Interdisciplinary		
UOE100/200/300	Open Electives I	4.5
UOE 100/200/300	Open Electives II	4.5
Total Requirements		**9.0**
Common Courses Requirements		
Number	**Course Name**	**Credits**
Common Courses (Choose any four courses)		
MKT301	Business to Business Marketing	4.5
MKT302	Buyer Behaviour	4.5
MKT303	Marketing on the Internet	4.5
MKT304	Marketing Research	4.5
HRM301	Managing People	4.5
HRM302	Diversity in the Workplace	4.5
HRM303	Staffing and Employment	4.5
HRM304	Labor Management Relations	4.5
FIN302	Financial Markets and Institutions	4.5
FIN303	Accounting Information Systems	4.5
FIN304	Business Forecasting and Simulation	4.5
FIN305	Personal Financial Management	4.5
Total Majors Requirements		**18**
Internship/Project (Co-op)		

INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Life-Long Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others-Choose Any	0.5
PCT102	IBM/Microsoft/Others-Choose Any	0.5
Total Requirements		**3.0**
Summary of Total Requirements		
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		58.5
Total Open Electives Requirements		9.0
Total Common Courses Requirements		18.0
Total Internship/Project (Co-op) Requirements		9.0
Total Professional Course Requirement		3.0
Bachelor of Business Administration Total Credits Required for Graduation		**129**

BBA with Specialization (Marketing; Digital Marketing; Data Analytics; Finance; Entrepreneurship; Human Resource Management; Mass Media; Hotel Management; Hospital Management; Supply Chain Management)

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
13 Core courses x 4.5 credit hours	= 58.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours
4 Specialization courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	Course Name	Credits
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 13 courses)

Number	Course Name	Credits
ACC101	Financial Accounting	4.5
ACC201	Cost and Managerial Accounting	4.5
ECO101	Business Economics	4.5
HRM201	Human Resource Management	4.5
FIN301	Financial Management I	4.5
LAW101	Business Law	4.5
MGT101	Introduction to Business	4.5
MGT201	International Business	4.5

HRM202	Organizational Theory and Behaviour	4.5
MKT101	Sales and Marketing	4.5
OPS201	Production and Operations Management	4.5
MGT203	Design Thinking	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC201	Management Information Systems	4.5
Total Core Requirements		**58.5**
Open Electives Interdisciplinary		
UOE100/200/300	Open Electives I	4.5
UOE 100/200/300	Open Electives II	4.5
Total Requirements		**9.0**
Specializations Requirements		
Number	**Course Name**	**Credits**
Marketing (Four Courses Required)		
MKT301	Business to Business Marketing	4.5
MKT302	Buyer Behaviour	4.5
MKT303	Marketing on the Internet	4.5
MKT304	Marketing Research	4.5
Total Specialization Requirements		**18**
Digital Marketing (Four Courses Required)		
DGM301	Advertising Management	4.5
DGM302	Design of Mobile and Web Applications	4.5
DGM303	Fundamentals of Digital Marketing	4.5
DGM304	Managing the Value of Customer Relationships	4.5
Total Specialization Requirements		**18**
Data Analytics (Four Courses Required)		
BAL301	Data Analytics Fundamentals	4.5
BAL302	Data Science and Business Strategy	4.5
BAL303	Data Analytics for Product Strategy Formation	4.5
BAL304	Strategy and Consumer Behaviour Analytics	4.5

Total Specialization Requirements		**18**
Finance (Four Courses Required)		
FIN302	Financial Markets and Institutions	4.5
FIN303	Accounting Information Systems	4.5
FIN304	Business Forecasting and Simulation	4.5
FIN305	Personal Financial Management	4.5
Total Specialization Requirements		**18**
Entrepreneurship (Four Courses Required)		
ENT301	Entrepreneurship Leadership	4.5
ENT302	Financing for Entrepreneurship	4.5
ENT303	New Venture Creation	4.5
ENT304	Project Management	4.5
Total Specialization Requirements		**18**
Human Resource Management (Four Courses Required)		
HRM301	Managing People	4.5
HRM302	Diversity in the Workplace	4.5
HRM303	Staffing and Employment	4.5
HRM304	Labor Management Relations	4.5
Total Specialization Requirements		**18**
Mass Media (Four Courses Required)		
MAS301	Communication Research	4.5
MAS302	Media Laws and Ethics	4.5
MAS303	Principles of Mass Communication	4.5
MAS304	Print and Electronic Media	4.5
Total Specialization Requirements		**18**
Hotel Management (Four Courses Required)		
HTM301	Front Office Operations and Management	4.5
HTM302	Food, Service and Catering Operations	4.5
HTM303	Housekeeping Operation	4.5
HTM304	Event Management	4.5
Total Specialization Requirements		**18**

Hospital Management (Four Courses Required)		
HSM301	Hospital Service Relations	4.5
HSM302	Hospital Quality Management and Audit	4.5
HSM303	Information Technology in Hospitals	4.5
HSM304	Recent Trends in Hospital Systems	4.5
Total Specialization Requirements		**18**
Supply Chain Management (Four Courses Required)		
SCM301	Supply Chain Service and Operations Management	4.5
SCM302	Supply Chain Risk Management	4.5
SCM303	Warehouse Control & Material Management	4.5
SCM304	Logistic Information Systems	4.5
Total Specialization Requirements		**18**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Life-Long Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others-Choose Any	0.5
PCT102	IBM/Microsoft/Others-Choose Any	0.5
Total Requirements		**3.0**
Summary of Total Requirements		
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		58.5
Total Open Electives Requirements		9.0
Total Specialization Requirements		18
Total Co-Op Requirements		9.0
Total Professional Course Requirement		3.0

Bachelor of Business Administration Total Credits Required for Graduation 129

BBA in Direct Selling and Network Marketing - 129 Credits

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
13 Core courses x 4.5 credit hours	= 58.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours
4 Specialization courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 13 courses)	**Number**	**Course Name**	**Credits**
MGT102		Introduction to Business with Direct Sales	4.5
ACC101		Financial Accounting	4.5
ECO101		Business Economics	4.5
HRM203		Organization Theory and Behaviour (Managing People)	4.5
MGT202		Design Thinking	4.5
MKT301		Business to Business Marketing	4.5
MKT102		Sales and Marketing with Direct Sales	4.5
MKT103		Networking and Building Relationships	4.5
MKT104		Role of Internet Marketing in Multi-level Marketing	4.5
FIN306		Financial Management in Network Marketing	4.5

HRM204	Human Resource Management in Network Marketing	4.5
LAW102	Regulatory Framework, guidelines, rules and acts in Direct Sales	4.5
TEC201	Management Information Systems	4.5
Total Core Requirements		**58.5**
Open Electives Interdisciplinary		
UOE100/200/300	Open Electives I	4.5
UOE 100/200/300	Open Electives II	4.5
Total Requirements		**9.0**
Specializations Requirements		
Number	**Course Name**	**Credits**
Direct Selling and Network Marketing (Four Courses Required)		
MKT305	Sales Skills	4.5
MKT306	Marketing Channels	4.5
MKT307	Supportive and Critical Factors in Direct Selling	4.5
DGM304	Managing the Value of Customer Relationships	4.5
Total Specialization Requirements		**18**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Life-Long Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others-Choose Any	0.5
PCT102	IBM/Microsoft/Others-Choose Any	0.5
Total Requirements		**3.0**
Summary of Total Requirements		
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		58.5

Total Open Electives Requirements	9.0
Total Specialization Requirements	18
Total Co-Op Requirements	9.0
Total Professional Course Requirement	3.0
Bachelor of Business Administration Total Credits Required for Graduation	**129**

Integrated BBA + MBA

This program is designed to give students the knowledge, hands on skills, analytical and leadership abilities they need for fast-track global careers in blue chip companies with one year less span of time in comparison to BBA and MBA separately.

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
14 Core courses x 4.5 credit hours	= 63 credit hours
8 MBA Core Courses x 4.5 credit hours	= 36 credit hours
4 Specialization BBA courses x 4.5 credit hours	= 18 credit hours
4 Specialization MBA courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 13.5 credit hours
8 Professional Certification Courses (PCC) x 0.5 credit hours	= 4 credit hours
40 Total courses x 4.5 credit hours + 8 PCC x 0.5	= 184 credit hours

This program typically takes 4 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	Course Name	Credits
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 14 courses)

Number	Course Name	Credits
ACC101	Financial Accounting	4.5
ACC201	Cost and Managerial Accounting	4.5
ECO101	Business Economics	4.5
HRM201	Human Resource Management	4.5
FIN301	Financial Management I	4.5
LAW101	Business Law	4.5
MGT101	Introduction to Business	4.5
MGT201	International Business	4.5
HRM202	Organizational Theory and Behaviour	4.5
MKT101	Sales and Marketing	4.5

OPS201	Production and Operations Management	4.5
MGT203	Design Thinking	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC201	Management Information Systems	4.5
Total Core Requirements		**63**
MBA Core Requirements		
ACC501	Accounting for Managerial Decision Making	4.5
ENT501	Entrepreneurship and Venture Management	4.5
MGT501	International business	4.5
HRM501	Human Resource Management	4.5
MGT507	Business Transformation	4.5
FIN506	Corporate Finance	4.5
MKT502	Strategic Business Marketing	4.5
TEC511	Data Visualization Business Intelligence	4.5
Total Core Requirements		**36**
General/BBA Specialization		
Select any Four Courses - 04 Courses* 4.5 Credits		18
General/MBA Specialization		
Select any Four Courses - 04 Courses* 4.5 Credits=		18
Internship (Co-op)		
CAP400	Capstone	4.5
INT300	Internship/Co-Op	4.5
INT600	Internship/Co-Op	4.5
Total Requirements		**13.5**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	4.5
PCC102	Environmental Science: Corporate Sustainability	4.5
PCC103	Harvard Certification - Ethics at Work	4.5
PCC104	Positive Intelligence	4.5
PCT101	IBM/Microsoft/Others - Choose Any	4.5

PCT102	IBM/Microsoft/Others - Choose Any	4.5
PCT103	IBM/Microsoft/Others- Choose Any	4.5
PCT104	IBM/Microsoft/Others - Choose Any	4.5

Summary of Total Requirements

Total Liberal Arts and Sciences Requirements	31.5
Total BBA Core Requirements	63
Total MBA Core Requirements	38
Total BBA Specialization Requirements	18
Total MBA Specialization Requirements	18
Total Co-Op Requirements	13.5
Total Professional Course Requirement	4.0
Integrated BBA to MBA Total Credits Required for Graduation	**184**

Bachelor of Commerce

School of Management

The mission of the Bachelor of Commerce is to allow students to build on a core of knowledge gained through the degree. The primary goal of the bachelor's program is to prepare students for the dynamic, changing realities of today's business environment.

B.COM

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
11 Core courses x 4.5 credit hours	= 49.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours
6 Common courses x 4.5 credit hours	= 27 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time.

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 11 courses)

ACC101	Financial Accounting	4.5
ACC201	Cost and Managerial Accounting	4.5
ECO201	Microeconomics	4.5
ECO202	Macroeconomics	4.5
FIN301	Financial Management	4.5
LAW101	Business Laws	4.5
MGT101	Introduction to Business	4.5
MKT101	Sales and Marketing	4.5
MGT203	Design Thinking	4.5

QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC201	Management Information Systems	4.5
TAX201	Individual and Corporate Taxes	4.5
Total Core Requirement		**49.5**
Open Electives Interdisciplinary		
UOE100/200/300	Open Electives I	4.5
UOE 100/200/300	Open Electives II	4.5
Total Requirements		**9.0**
Common Courses (Choose any Six Courses)		
ACF301	Accounting for Managerial Decision Making	4.5
ACF302	Advanced Managerial Accounting	4.5
ACF303	Contemporary Auditing	4.5
ACF305	Money the Bottom-Line	4.5
FSM304	Financial Analytics	4.5
FSM301	Financial Engineering and Risk Management	4.5
FSM302	Global Financial Markets and Instruments	4.5
FSM303	Using Machin Learning in Trading and Finance	4.5
Total Requirements		**27**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Life-Long Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others-Choose Any	0.5
PCT102	IBM/Microsoft/Others-Choose Any	0.5
Total Requirements		**3.0**

Summary of Total Requirements

Total Liberal Arts and Sciences Requirements	31.5
Total Core Requirements	49.5
Total Open Electives Requirement	9
Total Common Courses Requirements	27
Total Co-Op Requirements	9
Total Professional Course Requirement	3
Bachelor of Commerce Total Credits Required for Graduation	**129**

B. Com (Hons.)

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
11 Core courses x 4.5 credit hours	= 49.5 credit hours

2 Open Electives x 4.5 credit hours	= 9 credit hours
8 Common courses x 4.5 credit hours	= 36 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
30 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 138 credit hours**

This program typically takes 3 years to complete for student enrolled full time.

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 11 courses)

ACC101	Financial Accounting	4.5
ACC201	Cost and Managerial Accounting	4.5
ECO201	Microeconomics	4.5
ECO202	Macroeconomics	4.5
FIN301	Financial Management	4.5
LAW101	Business Laws	4.5
MGT101	Introduction to Business	4.5
MKT101	Sales and Marketing	4.5
MGT203	Design Thinking	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC201	Management Information Systems	4.5
TAX201	Individual and Corporate Taxes	4.5
Total Core Requirement		**49.5**

Open Electives Interdisciplinary		
UOE100/200/300	Open Electives I	4.5
UOE 100/200/300	Open Electives II	4.5
Total Requirements		**9.0**
Common Courses (Choose any Eight Courses)		
ACC301	Computerized Accounting System	4.5
ACC302	Business Data Processing Comparative Accounting Systems	4.5
ACF301	Accounting for Managerial Decision Making	4.5
ACF302	Advanced Managerial Accounting	4.5
ACF303	Contemporary Auditing	4.5
ACF305	Money the Bottom-Line	4.5
FSM304	Financial Analytics	4.5
FSM301	Financial Engineering and Risk Management	4.5
FSM302	Global Financial Markets and Instruments	4.5
FSM303	Using Machine Learning in Trading and Finance	4.5
Total Requirements		**36**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Life-Long Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others-Choose Any	0.5
PCT102	IBM/Microsoft/Others-Choose Any	0.5
Total Requirements		**3.0**
Summary of Total Requirements		
Total Liberal Arts and Sciences Requirements		31.5

Total Core Requirements	49.5
Total Open Electives Requirement	9
Total Common Courses Requirements	36
Total Co-Op Requirements	9
Total Professional Course Requirement	3
Bachelor of Commerce (H) Total Credits Required for Graduation	**138**

B. Com with Specializations (Accounts and Finance; Financial and Stock Markets Analytics)

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
11 Core courses x 4.5 credit hours	= 49.5 credit hours

2 Open Electives x 4.5 credit hours	= 9 credit hours
6 Specialization courses x 4.5 credit hours	= 27 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time.

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**
Core Requirements (Choose any 11 courses)		
ACC101	Financial Accounting	4.5
ACC201	Cost and Managerial Accounting	4.5
ECO201	Microeconomics	4.5
ECO202	Macroeconomics	4.5
FIN301	Financial Management	4.5
LAW101	Business Laws	4.5
MGT101	Introduction to Business	4.5
MKT101	Sales and Marketing	4.5
MGT203	Design Thinking	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC201	Management Information Systems	4.5
TAX201	Individual and Corporate Taxes	4.5

Total Core Requirement		**49.5**
Open Electives Interdisciplinary		
UOE100/200/300	Open Electives I	4.5
UOE 100/200/300	Open Electives II	4.5
Total Requirements		**9.0**
Specialization Requirements		
Number	Course Name	Credits
Accounts and Finance (Six Courses Required)		
ACF301	Accounting for Managerial Decision Making	4.5
ACF302	Advanced Managerial Accounting	4.5
ACF303	Contemporary Auditing	4.5
ACF304	Current Topics	4.5
ACF305	Money the Bottom-Line	4.5
FSM304	Financial Analytics	4.5
Total Specialization Requirements		**27**
Financial and Stock Market Analytics (Six Courses Required)		
ACF305	Money the Bottom-Line	4.5
FSM301	Financial Engineering and Risk Management	4.5
FSM302	Global Financial Markets and instruments	4.5
FSM303	Using Machine Learning in Trading and Finance	4.5
FSM304	Financial Analytics	4.5
FSM305	Current Topics	4.5
Total Specialization Requirements		**27**
Entrepreneurship (Six Courses Required)		
ENT301	Entrepreneurship Leadership	4.5
ENT302	Financing for Entrepreneurship	4.5
ENT303	New Venture Creation	4.5
ENT304	Project Management	4.5
ENT305	Enterprise Resource Planning	4.5
ENT306	Marketing for Entrepreneur	4.5
Total Specialization Requirements		**27**

Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Life-Long Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others-Choose Any	0.5
PCT102	IBM/Microsoft/Others-Choose Any	0.5
Total Requirements		**3.0**
Summary of Total Requirements		
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		49.5
Total Open Electives Requirement		9.0
Total Specialization Requirements		27
Total Co-Op Requirements		9.0
Total Professional Course Requirement		3.0
B. Com with Specialization Total Credits Required for Graduation		**129**

School of Sciences

Our School of Sciences often plays a pivotal role in finding answers to real world issues. Our curriculum is innovative, career-focused and application-oriented. It has a fine balance of theory, practical and

projects. The learnings allow you to solve problems demanded by Industry. Our programs train you to be innovators to solve real world problems.

BCA

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
13 Core courses x 4.5 credit hours	= 58.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours
4 Common courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time

Liberal Arts and Sciences

Course	**Courses Name**	**Credit**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 13 courses)

AIM301	Introduction to Artificial Intelligence & Machine Learning	4.5
CLD301	IT Infrastructure Landscape powered by IBM	4.5
CLD302	Cloud Computing Fundamentals powered by IBM	4.5
CST101	Database Management Systems	4.5
CST102	Introduction to Operating Systems	4.5
CST202	Computer Architecture	4.5
CYB301	Information Security Fundamentals powered by IBM	4.5
MTH202	Discrete Mathematics	4.5
MGT101	Introduction to Business	4.5

MGT203	Design Thinking	4.5
PRG101	Python Programming powered by IBM	4.5
PRG102	Data Structures and Algorithms using Java	4.5
PRG103	Object Oriented Programming using C++	4.5
PRG104	Software Engineering and Web Development	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
Total Core Requirements		**58.5**
Common Courses Requirements (Choose any 4 courses)		
DAL301	Introduction to Data Analytics	4.5
DAL402	Predictive Analytics	4.5
DAL303	Descriptive Analytics	4.5
DAL304	Big Data Analytics	4.5
MOC301	Responsive Mobile Platform	4.5
MOC302	Mobile Application Development Using Android	4.5
MOC303	Mobile Application Development Using IOS	4.5
MOC304	Enterprise Mobile Application Development	4.5
Total Requirement		**18**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	4.5
PCC102	Environmental Science: Corporate Sustainability	4.5
PCC103	Harvard Certification - Ethics at Work	4.5
PCC104	Positive Intelligence	4.5
PCT101	IBM/Microsoft/Others - Choose Any	4.5
PCT102	IBM/Microsoft/Others - Choose Any	4.5
Total Requirements		**3.0**

Summary of Total Requirements

Total Liberal Arts and Sciences Requirements	31.5
Total Core Requirements	58.5
Total Open Electives Requirements	9.0
Total Common Courses Requirements	18
Total Co-Op Requirements	9.0
Total Professional Course Requirement	3.0
Bachelor of Computer Application Total Credits Required for Graduation	**129**

BCA with Specializations (Data Analytics; Mobile Computing)

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
13 Core courses x 4.5 credit hours	= 58.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours

4 Specialization courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 9 credit hours
6 Professional Certification Courses (PCC) x 0.5 credit hours	= 3 credit hours
28 Total courses x 4.5 credit hours + 6 PCC x 0.5 credit hours	**= 129 credit hours**

This program typically takes 3 years to complete for student enrolled full time

Liberal Arts and Sciences

Course	**Courses Name**	**Credit**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (Choose any 13 courses)

AIM301	Introduction to Artificial Intelligence & Machine Learning	4.5
CLD301	IT Infrastructure Landscape powered by IBM	4.5
CLD302	Cloud Computing Fundamentals powered by IBM	4.5
CST101	Database Management Systems	4.5
CST102	Introduction to Operating Systems	4.5
CST202	Computer Architecture	4.5
CYB301	Information Security Fundamentals powered by IBM	4.5
MTH202	Discrete Mathematics	4.5
MGT101	Introduction to Business	4.5
MGT203	Design Thinking	4.5
PRG101	Python Programming powered by IBM	4.5
PRG102	Data Structures and Algorithms using Java	4.5
PRG103	Object Oriented Programming using C++	4.5
PRG104	Software Engineering and Web Development	4.5
QNT201	Quantitative Methods for Decision Making	4.5

RES201	Research Methods	4.5
Total Core Requirements		**58.5**
Specialization Requirements		
Data Analytics (Four Courses Required)		
DAL301	Introduction to Data Analytics	4.5
DAL402	Predictive Analytics	4.5
DAL303	Descriptive Analytics	4.5
DAL304	Big Data Analytics	4.5
Total Specialization Requirement		**18**
Mobile Computing (Four Courses Required)		
MOC301	Responsive Mobile Platform	4.5
MOC302	Mobile Application Development Using Android	4.5
MOC303	Mobile Application Development Using IOS	4.5
MOC304	Enterprise Mobile Application Development	4.5
Total Specialization Requirement		**18**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others - Choose Any	0.5
PCT102	IBM/Microsoft/Others - Choose Any	0.5
Total Requirements		**3.0**
Summary of Total Requirements		
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		58.5
Total Open Electives Requirements		9.0

Total Specialization Requirements	18
Total Co-Op Requirements	9.0
Total Professional Course Requirement	3.0
Bachelor of Computer Application Total Credits Required for Graduation	**129**

School of Engineering

The School of Engineering is an open platform for diverse voices where teaching runs parallel to the real world and students are groomed to join the global workforce. A student-centric pedagogy, project-based approach and design-driven curriculum provides students with an inclination for complex problem solving, design, innovation, and a passion for learning. The mission of the School of Engineering through its various programmes is to educate well-integrated individuals who possess

technical and social competence to succeed in professional arenas and design solutions for global problems.**Bachelor's in Technology (B.Tech) Computer Science Engineering**

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
21 Core courses x 4.5 credit hours	= 94.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours
6 Specialization courses x 4.5 credit hours	= 27 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 13.5 credit hours
8 Professional Certification Courses x 0.5 credit hours	= 4 credit hours
39 Total courses x 4.5 credit hours + 8 PCC x 0.5 credit hours	**= 179.5 credit hours**

This program typically takes 4 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (21 Courses Required)

AIM301	Introduction to Artificial Intelligence & Machine Learning	4.5
CLD301	IT Infrastructure Landscape powered by IBM	4.5
CLD302	Cloud Computing Fundamentals powered by IBM	4.5
CST204	Data Communication and Computer Networks	4.5
CST101	Database Management Systems	4.5
CST102	Introduction to Operations Systems	4.5
CST203	Topics in Computer Science	4.5
CST204	Embedded Systems powered by ARM	4.5
CST202	Computer Architecture	4.5
CST203	Wireless Communication	4.5

CYB301	Information Security Fundamentals powered by IBM	4.5
MGT101	Introduction to Business	4.5
MTH202	Discrete Mathematics	4.5
MTH203	Calculus and Algebra	4.5
MGT203	Design Thinking	4.5
PRG101	Python Programming powered by IBM	4.5
PRG102	Data Structures and Algorithms using Java	4.5
PRG103	Object Oriented Programming using C++	4.5
PRG104	Software Engineering and Web Development	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
Total Core Requirements		**94.5**

Common Courses Requirements (Choose any six courses)

Number	**Course Name**	**Credits**
AIM401	Machine Learning	4.5
AIM402	Deep Learning	4.5
AIM403	Computational Linguistics and Natural Language Processing	4.5
CLD401	Cloud Computing Architecture	4.5
CLD402	Cloud Computing Deployment Models	4.5
CLD403	Container Orchestration and Infrastructure Automation	4.5
CLD404	Security in Cloud	4.5
CYB401	Physical & IT System Security	4.5
CYB402	IT Application Security	4.5
CYB403	IT Data Security	4.5
CYB404	IT Network Security	4.5
CYB405	Ethical Hacking and Penetration Testing	4.5
CYB406	Digital Forensic	4.5
Total Requirements		**27**

Internship/Project (Co-op)

INT300	Internship (Co-op)	4.5
INT350	Internship (Co-op)	4.5

CAP400	Capstone	4.5
Total Requirements		**13.5**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others - Choose Any	0.5
PCT102	IBM/Microsoft/Others - Choose Any	0.5
PCT103	IBM/Microsoft/Others - Choose Any	0.5
PCT104	IBM/Microsoft/Others - Choose Any	0.5
Total Requirements		**4.0**
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		94.5
Total Open Electives Requirements		9.0
Total Common Requirements		27
Total Co-Op Requirements		13.5
Total Professional Course Requirement		4.0
Bachelor of Technology Total Credits Required for Graduation		**179.5**

Bachelor's in Technology (B.Tech) with Specialization (Artificial Intelligence & Machine Learning; Cloud Computing and Virtualization ; Cyber Security Digital Forensics; Healthcare Informatics and Information Technology)

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
21 Core courses x 4.5 credit hours	= 94.5 credit hours
2 Open Electives x 4.5 credit hours	= 9 credit hours

6 Specialization courses x 4.5 credit hours	= 27 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 13.5 credit hours
8 Professional Certification Courses x 0.5 credit hours	= 4 credit hours
39 Total courses x 4.5 credit hours + 8 PCC x 0.5 credit hours	**= 179.5 credit hours**

This program typically takes 4 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

Core Requirements (21 Courses Required)

AIM301	Introduction to Artificial Intelligence & Machine Learning	4.5
CLD301	IT Infrastructure Landscape powered by IBM	4.5
CLD302	Cloud Computing Fundamentals powered by IBM	4.5
CST204	Data Communication and Computer Networks	4.5
CST101	Database Management Systems	4.5
CST102	Introduction to Operations Systems	4.5
CST203	Topics in Computer Science	4.5
CST204	Embedded Systems powered by ARM	4.5
CST202	Computer Architecture	4.5
CST203	Wireless Communication	4.5
CYB301	Information Security Fundamentals powered by IBM	4.5
MGT101	Introduction to Business	4.5
MTH202	Discrete Mathematics	4.5
MTH203	Calculus and Algebra	4.5
MGT203	Design Thinking	4.5

PRG101	Python Programming powered by IBM	4.5
PRG102	Data Structures and Algorithms using Java	4.5
PRG103	Object Oriented Programming using C++	4.5
PRG104	Software Engineering and Web Development	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
Total Core Requirements		**94.5**
Specialization Requirements		
Number	**Course Name**	**Credits**
Artificial Intelligence & Machine Learning (Six Courses Required)		
AIM401	Machine Learning	4.5
AIM402	Deep Learning	4.5
AIM403	Computational Linguistics and Natural Language Processing	4.5
AIM404	Pattern and Anomaly Detection	4.5
AIM405	Application of Machine Learning in Industries	4.5
DAL402	Predictive Analytics	4.5
Total Specialization Requirement		**27**
Cloud Computing and Virtualization (Six Courses Required)		
CLD401	Cloud Computing Architecture	4.5
CLD402	Cloud Computing Deployment Models	4.5
CLD403	Container Orchestration and Infrastructure Automation	4.5
CLD404	Security in Cloud	4.5
CLD405	Managing the Cloud	4.5
CLD406	Cloud Performance Tuning	4.5
Total Specialization Requirement		**27**
Cyber Security and Digital Forensics (Six Courses Required)		
CYB401	Physical & IT System Security	4.5
CYB402	IT Application Security	4.5
CYB403	IT Data Security	4.5
CYB404	IT Network Security	4.5
CYB405	Ethical Hacking and Penetration Testing	4.5

CYB406	Digital Forensic	4.5
Total Specialization Requirement		**27**
Healthcare Informatics (Six Courses Required)		
HCA401	Fundamentals of Healthcare Informatics	4.5
HCA402	Healthcare Delivery Models and Processes	4.5
HCA403	Healthcare Standards & Quality Assurance	4.5
HCA404	Analytics for Healthcare	4.5
HCA405	Current Topics	4.5
HCA406	Current Topics	4.5
Total Specialization Requirement		**27**
Information Technology (Six Courses Required)		
IFT401	Information Systems Management	4.5
IFT402	Network Administration	4.5
IFT403	Software Development, Engineering Systems	4.5
IFT404	Web and Application Developments	4.5
IFT405	Cybersecurity, Digital Forensic and System Security	4.5
IFT406	Information Technology Entrepreneurship	4.5
Total Specialization Requirement		**27**
Internship/Project (Co-op)		
INT300	Internship (Co-op)	4.5
INT350	Internship (Co-op)	4.5
CAP400	Capstone	4.5
Total Requirements		**13.5**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC102	Environmental Science: Corporate Sustainability	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT101	IBM/Microsoft/Others - Choose Any	0.5
PCT102	IBM/Microsoft/Others - Choose Any	0.5
PCT103	IBM/Microsoft/Others - Choose Any	0.5

PCT104	IBM/Microsoft/Others - Choose Any	0.5
Total Requirements		**4.0**
Total Liberal Arts and Sciences Requirements		31.5
Total Core Requirements		94.5
Total Open Electives Requirements		9.0
Total Majors Requirements		27
Total Co-Op Requirements		13.5
Total Professional Course Requirement		4.0
Bachelor of Technology with Specialization Total Credits Required for Graduation		**179.5**

Integrated B. Tech + MBA

The 4-year integrated degree program of BTECH and MBA combines two challenging specialized disciplines in one curriculum. The course has been designed to negotiate the challenges of globalization. It will prepare managers for industry and business who can bring the technical perspectives to optimize managerial decision making.

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
20 B. Tech Core courses x 4.5 credit hours	= 90 credit hours

8 MBA Core courses x 4.5 credit hours	= 36 credit hours
6 B. Tech Specialization courses x 4.5 credit hours	= 27 credit hours
4 MBA Specialization courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 22.5 credit hours
8 Professional Certification Courses (PCC) x 0.5 credit hours	S= 5 credit hours
50 Total courses x 4.5 credit hours + 10 PCC x 0.5	= 230 credit hours

This program typically takes 4 years to complete for student enrolled full time

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

B. Tech Core Requirements (20 Courses Required)

AIM401	Introduction to Artificial Intelligence & Machine Learning Powered by IBM	4.5
CLD421	Infrastructure Landscape powered by IBM	4.5
CLD422	Cloud Computing Fundamentals powered by IBM	4.5
COM110	Data Communication and Computer Networks	4.5
CST201	Database Management Systems	4.5
CST202	Introduction to Operations Systems	4.5
CST204	Embedded Systems powered by ARM	4.5
CST205	Computer Architecture	4.5
CST206	Wireless Communication	4.5
CYB411	Information Security Fundamentals powered by IBM	4.5
MGT151	Introduction to Business	4.5
MTH393	Discrete Mathematics	4.5

MTH394	Calculus and Algebra	4.5
PMG152	Design Thinking	4.5
PRG211	Python Programming powered by IBM	4.5
PRG212	Data Structures and Algorithms using Java	4.5
PRG213	Object Oriented Programming using C++	4.5
PRG214	Software Engineering and Web Development	4.5
QNT392	Quantitative Methods for Decision Making	4.5
RES290	Research Methods	4.5
Total Core Requirements		**90**
MBA Core Requirements		
ACC501	Accounting for Managerial Decision Making	4.5
ENT501	Entrepreneurship and Venture Management	4.5
MGT501	International business	4.5
HRM501	Human Resource Management	4.5
MGT507	Business Transformation	4.5
FIN506	Corporate Finance	4.5
MKT502	Strategic Business Marketing	4.5
TEC511	Data Visualization Business Intelligence	4.5
Total Core Requirements		**36**
B. Tech Specialization		
Select any six Courses - 06 Courses* 4.5 Credits		**27**
MBA Specialization		
Select any Four Courses - 04 Courses* 4.5 Credits		**18**
Internship (Co-op)		
CAP400	Capstone	4.5
APT700	Applied Thesis	4.5
INT300	Internship/Co-Op	4.5
INT350	Internship (Co-op)	4.5
INT600	Internship/Co-Op	4.5
Total Requirements		**22.5**
Professional Core Courses		

PCC101	Skills for Lifelong Learning	4.5
PCC102	Environmental Science: Corporate Sustainability	4.5
PCC103	Harvard Certification - Ethics at Work	4.5
PCC104	Positive Intelligence	4.5
PCT100	Advanced Excel/Word	4.5
PCT101	IBM/Microsoft/Others - Choose Any	4.5
PCT102	IBM/Microsoft/Others - Choose Any	4.5
PCT103	IBM/Microsoft/Others- Choose Any	4.5
PCT104	IBM/Microsoft/Others - Choose Any	4.5
PCT105	IBM/Microsoft/Others- Choose Any	4.5
Total Requirement		**5**

Summary of Total Requirements	
Total Liberal Arts and Sciences Requirements	31.5
Total B. Tech Core Requirements	90
Total MBA Core Requirements	36
Total B. Tech Specialization Requirements	27
Total MBA Specialization Requirements	18
Total Co-Op Requirements	22.5
Total Professional Course Requirement	5.0
Integrated B. Tech to MBA Total Credits Required for Graduation	**230**

Integrated B. Tech + M. Tech

This program is designed to give students the knowledge, hands on skills, analytical and leadership abilities they need for fast-track global careers in blue chip companies with one year less span of time in comparison to BTech and MTech separately.

7 Liberal Arts and Sciences courses x 4.5 credit hours	= 31.5 credit hours
20 B. Tech Core courses x 4.5 credit hours	= 90 credit hours

9 M. Tech Core courses x 4.5 credit hours	= 36 credit hours
6 B. Tech Specialization courses x 4.5 credit hours	= 27 credit hours
4 M. Tech Specialization courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op and Capstone courses x 4.5 credit hours	= 22.5 credit hours
8 Professional Certification Courses (PCC) x 0.5 credit hours	= 5 credit hours
51 Total courses x 4.5 credit hours + 10 PCC x 0.5	= 234.5 credit hours

This program typically takes 4 years to complete for student enrolled full time.

Liberal Arts and Sciences

Number	**Course Name**	**Credits**
ENG101	The Art of Conversation I	4.5
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
HUM101	Critical and Creative Thinking Skills	4.5
MAT201	Business Mathematics	4.5
PSY202	The Science of Happiness	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
Total Requirements		**31.5**

B. Tech Core Requirements (20 Courses Required)

AIM401	Introduction to Artificial Intelligence & Machine Learning Powered by IBM	4.5
CLD421	Infrastructure Landscape powered by IBM	4.5
CLD422	Cloud Computing Fundamentals powered by IBM	4.5
COM110	Data Communication and Computer Networks	4.5
CST201	Database Management Systems	4.5
CST202	Introduction to Operations Systems	4.5
CST204	Embedded Systems powered by ARM	4.5
CST205	Computer Architecture	4.5
CST206	Wireless Communication	4.5
CYB411	Information Security Fundamentals powered by IBM	4.5
MGT151	Introduction to Business	4.5
MTH393	Discrete Mathematics	4.5

MTH394	Calculus and Algebra	4.5
PMG152	Design Thinking	4.5
PRG211	Python Programming powered by IBM	4.5
PRG212	Data Structures and Algorithms using Java	4.5
PRG213	Object Oriented Programming using C++	4.5
PRG214	Software Engineering and Web Development	4.5
QNT392	Quantitative Methods for Decision Making	4.5
RES290	Research Methods	4.5
Total Core Requirements		**90**
M. Tech Core Requirements		
PRG501	Design and Analysis of Algorithms	4.5
PRG502	Object Oriented Analysis and Design	4.5
CST501	Advanced Network Security	4.5
AIM501	Artificial Intelligence and Machine Learning Applications	4.5
CLD501	Cloud Computing	4.5
CST502	Wireless Computing	4.5
CST503	Advanced DBMS	4.5
CST504	Distributed Systems	4.5
PRG503	Advanced Web Design	4.5
Total Core Requirements		**40.5**
B. Tech Specialization		
Select any six Courses - 06 Courses* 4.5 Credits		**27**
M. Tech Specialization		
Select any Four Courses - 04 Courses* 4.5 Credits=		**18**
Internship (Co-op)		
CAP400	Capstone	4.5
APT700	Applied Thesis	4.5
INT300	Internship/Co-Op	4.5
INT350	Internship (Co-op)	4.5
INT600	Internship/Co-Op	4.5
Total Requirements		**22.5**

Professional Core Courses

PCC101	Skills for Lifelong Learning	4.5
PCC102	Environmental Science: Corporate Sustainability	4.5
PCC103	Harvard Certification - Ethics at Work	4.5
PCC104	Positive Intelligence	4.5
PCT100	Advanced Excel/Word	4.5
PCT101	IBM/Microsoft/Others - Choose Any	4.5
PCT102	IBM/Microsoft/Others - Choose Any	4.5
PCT103	IBM/Microsoft/Others- Choose Any	4.5
PCT104	IBM/Microsoft/Others - Choose Any	4.5
PCT105	IBM/Microsoft/Others- Choose Any	4.5
Total Requirement		**5**

Summary of Total Requirements

Total Liberal Arts and Sciences Requirements	31.5
Total B. Tech Core Requirements	90
Total M. Tech Core Requirements	40.5
Total B. Tech Specialization Requirements	27
Total M. Tech Specialization Requirements	18
Total Co-Op Requirements	22.5
Total Professional Course Requirement	5.0
Integrated B. Tech to M. Tech Total Credits Required for Graduation	**234.5**

Undergraduate Course Descriptions

ACC101 Financial Accounting 4.5

This course is an introduction to the basics of accounting procedures. Topics include accounting techniques and cycles, billings, balance sheets, and financial statements. This course expands the student's knowledge of preparing balance sheets and financial statements. Students prepare general ledger entries, payroll, and discuss budget control. **Prerequisite: None**

ACC201 Cost and Managing accounting 4.5

This course covers financial accounting concepts and managerial and cost accounting topics. The course introduces finance and its importance and relevance to business operations. It covers the internal financial environment of a business. Topics include financial statements analysis, cost accounting, job order costing, and process product costing. **Prerequisite: ACC101**

ACC301 Computerized Accounting Systems 4.5

This course is an introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package. **Prerequisite: None**

ACC302 Business Data Processing Comparative Accounting Systems 4.5

This course focuses on the impact of information technology on accounting including developments in the Internet, electronic commerce, EDI and databases. Additionally, the course provides information on developing, implementing, and maintaining an accounting information system. Also addressed are the increasingly competitive business environment and techniques to reap the most value at the least cost. **Prerequisite: None**

ACF301 Accounting for Managerial Decision making 4.5

This course provides an introduction to accounting's measurement role inside of an organization and how accountants communicate information that helps managers and employees make operational decisions. In particular, you will learn how cost information is created and organized to help managers and employees conduct profitability analyses, develop and choose products, make pricing decisions, and make common business decisions. **Prerequisite: FIN301**

ACF302 Advance Managerial Accounting 4.5

This course will introduce the students to Advanced Managerial Accounting. The course expands further on conceptual understanding of the role of management accounting. Topics include relevant costing, capital budgeting, transfer pricing, balanced scorecard, inventory management, variance and profitability analysis, performance measurement and compensation, and the application of management accounting concepts and techniques to support business decision making. **Prerequisite: FIN301**

ACF303 Contemporary Auditing 4.5

This course is the first in a two-part series that deals with auditing a company's financial reports, internal controls, and Electronic Data Processing (EDP) systems. Topics include auditing standards, evidence, audit planning and documentation, materiality and risk, internal control, statistical tools, and the overall audit plan and program. **Prerequisite: FIN301**

ACC304 Current Topics of ACF 4.5

Special topics courses are developed to cover emerging issues or specialized content not represented in the main curriculum. **Prerequisite: FIN301**

ACF305 Money the Bottom line

This course focuses on financial considerations and their implications in all types of organizations. It provides students with the skills to understand and evaluate the profit and loss, balance sheet, and cash flow statements for an organization. **Prerequisite: FIN301**

AIM301 Introduction to Artificial Intelligence & Machine Learning Powered by IBM 4.5

The main focus of the course will be to give you a high-level overview of what Artificial Intelligence & Machine Learning are, and what types of problems they are particularly suited to solve.

AIM401 Machine Learning 4.5

The objective of the course is to learn what machine learning is and how it is related to data analysis and statistics. The course will impart knowledge on how various machine learning algorithms search for data patterns which can be used to make decisions and predictions for practical problem solving. **Prerequisite: None**

AIM402 Deep Learning 4.5

Deep learning is the machine learning technique behind the most exciting capabilities in diverse areas like robotics, natural language processing, image recognition, and artificial intelligence. By the end of the course, you'll become familiar with the fundamental concepts and terminology used in deep-learning and understand why deep learning techniques are so powerful today. **Prerequisite: None**

AIM403 Computational Linguistics and Natural Language Processing 4.5

This course is an introduction to computational methods in empirical linguistic analysis and natural language processing. Topics include the use of text corpora and other sources of linguistic data; morphological analysis, parsing and language modelling; applications in areas such as information retrieval and machine translation. **Prerequisite: None**

AIM404 Pattern and Anomaly Detection 4.5

Modern businesses are beginning to understand the importance of interconnected operations to get the full picture of their business. Besides, they need to respond to fast-moving changes in data promptly, especially in case of cybersecurity threats. Students will learn how AI and ML plays a role in detecting such patterns and fix anomalies in data. **Prerequisite: None**

AIM407 Application of Machine Learning in Industries 4.5

The course starts with the introduction to Machine learning and extends the same to introduce the applications of the same in various industries like Banking and Securities, Communication, Media and Entertainment, Healthcare and Life Sciences, Education, Manufacturing and Petroleum Industries, government and insurance. **Prerequisite: None**

BAL301 Data Analytics Fundamentals 4.5

In this course, you'll be introduced to many of the primary types of data analytics and core concepts, learn about the tools and skills required to conduct data analysis. The foundational math and statistics used in data analysis and workflows for conducting efficient and effective data analytics. This course covers a wide variety of topics that are critical for working in data analytics and are designed to give you an introduction and overview as you begin to build relevant knowledge and skills. **Prerequisite: None**

BAL302 Data Science and Business Strategy 4.5

This course uniquely combines business strategy scenarios, metrics, advanced analytic approaches, and the simplicity of Excel examples for real-world applications. The course covers Strategic Metrics, Strategic Scenarios, and Strategic Decision Models with downloadable examples in Excel. Learn

techniques and practical tools for selecting the most effective strategic option for your business. **Prerequisite: None**

BAL303 Data Analytics for Product Strategy Formation 4.5

This course you will learn Developing product introduction strategy; Formulating the data driven pricing strategy; Analyse profitability potential for new products; Estimating the potential volume and new product demand and Managing products with sustainable competitive advantage.

BAL304 Strategy and Consumer Behaviour Analytics 4.5

This course will introduce you to a range of analytical methods, ensuring you develop a solid foundation in the essential skills for consumer analytics and marketing strategy. You'll learn how to analyse geographic data using GIS software and understand the application of this in retail modelling, to evaluate new markets and locations. **Prerequisite: None**

CAP400 Capstone 4.5

Students independently research a topic to obtain a deep understanding of the subject matter and often work towards developing a solution, product, innovative idea or a prototype on a real world problem. Students will dig into detail about the purpose of this significant work as well as methods to overcome some hurdles. **Prerequisite: None**

CLD301 IT Infrastructure Landscape powered by IBM 4.5

This course provides the overview of the new IT infrastructure landscape in the industry. Students will learn some important concepts such as storage systems, servers, network and security, and middleware applications. **Prerequisite: None**

CLD302 Cloud Computing Fundamentals powered by IBM 4.5

Today we hear about many IT fields which are growing very fast and are the future of our world such as Big Data, IoT, Artificial intelligence, machine learning, data science, etc. The course also focusses on the security of cloud computing and the challenges around it as the security nowadays is very critical aspect and we will see some cybersecurity attacks. You will also learn how to choose between the various cloud solutions for our business. **Prerequisite: None**

COM301 Business Communication 4.5

This course prepares the student for communication in the workplace. The student prepares memorandums, letters, proposals, presentations, newsletters, and flyers. Discussions focus on information exchange in and outside of the organization. Student's presentations are critiqued on the message intended and message received. **Prerequisite: None.**

CST101 Database Management Systems 4.5

This course is designed for students with limited or no previous database experience. Course outcomes include a solid understanding of fundamental database terms and concepts such as tables, queries, forms and reports, and their application using a popular database. **Prerequisite: None**

CST102 Introduction to Operating Systems. 4.5

Covers the classical internal algorithms and structures of operating systems, including CPU scheduling, memory management, and device management. Considers the unifying concept of the operating system as a collection of cooperating sequential processes. **Prerequisite: None**

CST103 Topics in Computer Science 4.5

Special topics courses are developed to cover emerging issues or specialized content not represented in the main curriculum. **Prerequisite: None**

CST104 Embedded Systems powered by ARM 4.5

This course introduces students to the design and analysis of computational systems that interact with physical processes. Applications of such systems include medical devices and systems, consumer electronics, toys and games, assisted living, traffic control and safety, automotive systems, process control, energy management and conservation. **Prerequisite: None**

CST202 Computer Architecture 4.5

This course covers the fundamental issues in the design of modern computer systems, including the design and implementation of key hardware components such as the processor, memory, and I/O devices, and the software/hardware interface. **Prerequisite: None**

CST203 Wireless Communication 4.5

An understanding on functioning of wireless communication system and evolution of different wireless communication systems and standards. 2 An ability to compare recent technologies used for wireless communication. An ability to explain the architecture, functioning, protocols, capabilities and application of various wireless communication networks. **Prerequisite: None**

CYB301 Information Security Fundamentals powered by IBM 4.5

Information Security for Everyone is designed to teach the principles and practices that all computer users need to keep themselves safe, both at work and at home. By presenting best practices along with a small amount of theory, trainees are taught both what to do and why to do it. **Prerequisite: None**

CYB401 Physical & IT System Security 4.5

This course focuses on the physical security of an organization, including threats, vulnerabilities, and controls. Social Engineering is a critical factor in physical security that is investigated. **Prerequisite: None**

CYB402 IT Application Security 4.5

Students will gain an understanding of computer code that can be described as harmful or malicious. Both technical and non-technical attacks will be discussed. They will learn how an organization can protect itself from these attacks. They will also learn concepts in endpoint device security, cloud infrastructure security, securing big data systems, and securing virtual environments. **Prerequisite: None**

CYB403 IT Data Security 4.5

Students will gain knowledge of security in Data and Big Data environments. They will discover cryptographic principles, mechanisms to manage access controls in Data systems. They will also learn how IT organizations cost-effectively handle data growth, safely retire legacy systems and applications, optimize test data management, and protect sensitive data. **Prerequisite: None**

CYB404 IT Network Security 4.5

This course helps to explain the intricacies of the continually changing area of network security by studying the main issues involved in achieving a reasonable degree of resilience against attacks. Students are introduced to network level security mechanisms: Encryption of files and firewalls, etc. **Prerequisite: None**

CYB405 Ethical Hacking and Penetration Testing 4.5

This course investigates attackers' tactics and strategies to better understand possible vulnerabilities and intrusions. Students engage in virtual labs on penetration testing and respond to vulnerabilities and intrusions through ethical hacking techniques, actually carrying out reconnaissance, launching an attach, and evaluating the results. **Prerequisite: None**

CYB406 Digital Forensics 4.5

This course focuses on review of the specific manifestations of cybercrime, including hacking, viruses, and other forms of malicious software. Methods to investigate cybercrime, focuses on requirements for collection and reporting of evidence for possible use in criminal cases. **Prerequisite: None**

DAL301 Introduction to Data Analytics 4.5

This course will cover fundamental algorithms and techniques used in Data Analytics. The statistical foundations will be covered first, followed by various machine learning and data mining algorithms. **Prerequisite: None**

DAL302 Predictive Analytics 4.5

Predictive modeling (also referred to predictive analytics and machine learning) uses data and statistical techniques to predict outcomes. In this course students will learn, through a hands on approach, the methods of prediction and classification by employing techniques such as CART, various regression models, GLM, factor analysis, and cluster analysis among others. Students will learn how to build models using SPSS Modeler and SPSS statistics to predict categorical and continuous outcomes, test those models, interpret and present the results. **Prerequisite: None**

DAL303 Descriptive Analytics 4.5

This course aims to teach students the descriptive analytics lifecycle. Learners will learn to ask the appropriate analytics questions, identify and aggregate data sources and create data models. They will apply techniques to analyse data captured in these models and also create appropriate visualizations components to gain insights from the data. **Prerequisite: None**

DAL304 Big Data Analytics 4.5

A Big Data ecosystem is the one with huge volumes of information and transaction data. The objective of the course is to learn tools and techniques to apply analytics on such data which would point to various business benefits including new revenue generation opportunities, better customer service, more effective marketing, better operational efficiency and a competitive edge over rivals. **Prerequisite: None**

DAL402 Predictive Analytics 4.5

Predictive modelling (also referred to predictive analytics and machine learning) uses data and statistical techniques to predict outcomes. In this course students will learn, through a hands-on approach, the methods of prediction and classification by employing techniques such as CART, various regression models, GLM, factor analysis, and cluster analysis among others. **Prerequisite: None**

DGM301 Advertising Management 4.5

This course addresses the elements of advertising and the media. Topics include advertising concepts, selection of media, and the use of media and advertising as marketing communications tools. The course also emphasizes the ongoing convergence of media content and commercial messages and how it is redefining marketing communications. **Prerequisite: None**

DGM302 Design of Mobile and Web Applications 4.5

The Mobile and Web Applications Design programme provides a thorough grounding in the core skills and knowledge of digital media & mobile/tablet/web platforms. The course provides a thorough grounding in the core skills and knowledge of digital media technologies and offers specialist production techniques that equip graduates with a valuable set of technical and design skills, highly relevant to a range digital media industries. **Prerequisite: None**

DGM303 Fundamentals of Digital Marketing 4.5

This course provides students with the skills and knowledge necessary for using innovative and creative thinking strategies to improve digital marketing planning and execution. Emphasis is placed upon learning critical skills to identify and facilitate innovative behaviour and collaboration within the organization that will increase sustainable business growth and strengthen abilities to respond to organizational changes and challenges. **Prerequisite: None**

DGM304 Managing the Value of Customer Relationships 4.5

This course evaluates how organizations manage relationships with their customers and apply research-based marketing information to the development and marketing of products and services tailored to target customers. Topics include market segmentation, target marketing, delivering superior value, relationship marketing, ethics, and marketing strategy. **Prerequisite: None**

ECO101 Business Economics 4.5

This course examines supply and demand, market demand and elasticity, cost theory, market structures, pricing theory, and consumer behaviour Regulation, antitrust policy, and income distribution are also discussed. **Prerequisite: MGT101**

ECO201 Microeconomics 4.5

This course provides students with the foundation theories of basic microeconomics including an introduction into the study of economics and analyses of economic agents' behaviors, particularly that of the individual and the firm. The course begins with a description of the subject area, and continues to introduce the basic concepts and theories that are used as the foundation of microeconomic theory and analysis. **Prerequisite: None**

ECO202 Macroeconomics 4.5

The goal of principles of macroeconomics is to provide students with a broad overview of the aggregate economy. One important goal of this course is to provide students with a good understanding of aggregate economic accounts and definitions, principally so that they can read and understand news and television reporting of the aggregate economy. **Prerequisite: ECO201**

ENG101 The Art of Conversation I 4.5

This course is intended for students of Business English. It provides stimulating and interesting content both for students who have not yet worked in business and for people who are working and have experience of business environments. The sessions provide practical reading, writing, speaking,

listening, and writing skills and a wide range of essential business vocabulary and grammar. **Prerequisite: None**

ENG201 The Art of Conversation II 4.5

The focus of this course is mostly on the four skills (R W L S), vocabulary development, and application of grammar concepts in daily life. A variety of lexis will be used to enable the participants to use a range of exponents to express their opinions on various topics like festivals, everyday communication, homes and houses, and family relationships to name a few. **Prerequisite: ENG101**

ENT301 Entrepreneurial Leadership 4.5

Through the study of successful leaders and their companies, students learn techniques to move a company from mediocre to great. Topics include goal setting; culture development; vision; profits; technology; and effects of change, discipline, and necessary leadership qualities. **Prerequisite: None**

ENT302 Financing for Entrepreneurship 4.5

The Entrepreneurial Finance course prepares students to be competent in entrepreneurship and corporate finance management skills. The course focuses on specific financial planning and financial decision-making needs of entrepreneurial ventures, including stat up and development phase financial and management problems. **Prerequisite: None**

ENT303 New Venture Creation 4.5

This course provides research and knowledge about the entrepreneurial process. Topics include opportunity recognition, teamwork, resource requirements equity creation, recognizing opportunities, effects of the Internet, attitudes and behaviours, rewards and incentives, ethics, finance, and a business plan. **Prerequisite: None**

ENT304 Project Management 4.5

This course allows students to manage a project within their major field of study. Students prepare a project plan including details of their project, deliverables, dates they are completed, and the associated learning exhibited. Students implement their plan and record weekly status on their progress, issues, decisions, and learning. At the conclusion of the course, students complete their projects and summarize their results in a final report. **Prerequisite: None.**

ENT305 Enterprise Resource Planning 4.5

The objectives of this Course are 1. To provide a contemporary and forward-looking on the theory and practice of Enterprise Resource Planning Technology. To focus on a strong emphasis upon practice of theory in Applications and Practical oriented approach. To train the students to develop the basic understanding of how ERP enriches the business organizations in achieving a multidimensional growth. **Prerequisite: None.**

ENT306 Marketing for Entrepreneur 4.5

This course provides the knowledge base required of an entrepreneur. In this course you will learn several key concepts of entrepreneurship with an emphasis on value creation through marketing, especially in the context of the new economy. Starting from the inception of a business idea to its execution, this course will provide participants, in addition to the knowledge base, a framework to understand the workings of a business. Students will learn the mechanics of writing a business plan that is the launch pad of a viable new. **Prerequisite: None.**

FIN301 Financial Management I 4.5

This course teaches the concepts and skills of financial planning within a business. Concepts covered include how to use financial statements and how to plan appropriate action. Specific topics are preparing budgets, analysing investment options, and assessing risk and return of financing business endeavours. **Prerequisite: ACC182**

FIN302 Financial Markets and Institution 4.5

Course is aimed at study of the fundamentals of financial markets and financial instruments, the features of the formation of modern financial markets, on the practical application of financial instruments, the types of financial institutions and their roles and functions in the financial markets. **Prerequisite: None**

FIN303 Accounting Information Systems 4.5

This course focuses on the impact of information technology on accounting including developments in the Internet, electronic commerce, EDI and databases. Additionally, the course provides information on developing, implementing, and maintaining an accounting information system. Also addressed are the increasingly competitive business environment and techniques to reap the most value at the least cost. **Prerequisite: ACC201**

FIN304 Business Forecasting and Simulation 4.5

This course examines the application of economic theory and methodology needed by business managers to forecast both technical and nontechnical needs. Topics include tools and techniques for analysis, consumer and firm behavior, product demand, evaluation of decisions, technology benefits and challenges and interactions between firms and the marketplace. **Prerequisite: FIN301**

FIN305 Personal Financial Management 4.5

This course introduces the student to the concepts, tools, and applications of personal finance and investments. The course assumes little or no prior knowledge of the subject matter and focuses on helping the student understand the process of financial planning and the logic that drives it. **Prerequisite: None.**

FIN306 Financial Management in Network Marketing 4.5

Being a financially successful enterprise is the aim of any organization and therefore, every function in the organization is expected to adhere to financial management norms and practices. Marketing and advertising being one such function in which financial management plays a major role, there are financial managers who dedicatedly work with the marketing teams in their organization. Marketing and advertising deals with the promotion of a product or service or several products and services that an organization sells. The mode and tools of promotion vary according to the purpose of the promotional campaign. **Prerequisite: None.**

FIN376 Managerial Finance 4.5

This course introduces you to the world of modern finance, especially to the financial operations of business. It covers the concepts of time value of money, asset valuation, risk and return paradigm, capital budgeting, financing, and pay-out decisions, and derivatives. **Prerequisite: FIN301**

FSM301 Financial Engineering and Risk Management 4.5

This course will focus on the application of derivatives in addressing financial problems. There will be a focus on the use of futures as risk-management and securities structuring instruments. The emphasis in the course is on financial management and pricing rather than the mathematics of derivatives. **Prerequisite: FIN301**

FSM302 Global Financial Markets and instruments 4.5

This course explores the role that international finance markets play in the business environment. Students study principles and applications of inter- national financial markets and their impact on the world economy. **Prerequisite: FIN301**

FSM303 Using Machine Learning in Trading and Finance 4.5

This course provides the foundation for developing advanced trading strategies using machine learning techniques. In this course, you'll review the key components that are common to every trading strategy, no matter how complex. You'll be introduced to multiple trading strategies including quantitative trading, pairs trading, and momentum trading. role that international finance markets play in the business environment. Students study principles and applications of inter- national financial markets and their impact on the world economy. **Prerequisite: FIN301**

FSM304 Financial Analytics 4.5

The world of finance offers a range of opportunities to profit from. This requires a good understanding of the financial concepts, and their application to real-world data and analysis. We have carefully designed this course to enhance the ability of all finance professionals who are engaged or interested in learning how to evaluate opportunities in financial investments. **Prerequisite: FIN301**

FSM305 Current Topics 4.5

Special topics courses are developed to cover emerging issues or specialized content not represented in the main curriculum. **Prerequisite: FIN390**

HCA401 Fundamentals of Healthcare Informatics 4.5

Health informatics fundamentally deals with acquisition (recording), processing, interpreting, and using the healthcare (patient) data by domain experts. Healthcare informatics generally refers to management of data/information in healthcare than application of computers in it – which is centred on patient care. **Prerequisite: None**

HCA402 Healthcare Delivery Models and Processes 4.5

This course will introduce important concepts in this field including how value in healthcare is measured, what some key influencers of healthcare are and how the healthcare delivery system will be examined in this course. We will use various lenses such as: site of care delivery, payment models, payers and humans that work in the delivery system to dissect this value chain. **Prerequisite: None**

HCA403 Healthcare Standards & Quality Assurance 4.5

The healthcare tetralogy course is intended for anyone interested in healthcare organization as practiced. A range of healthcare organizations are discussed (e.g., medical, dental, pharmaceutical, and public health). This course is particularly useful to anyone working in the healthcare industry who either has a developing interest in the issues important to the administration of healthcare organization operations; or some expertise, but wishes an overview or refresher of the issues. **Prerequisite: None**

HCA404 Analytics for Healthcare 4.5

This course is intended for data and technology professionals with no previous healthcare experience who are seeking an industry change to work with healthcare data. In this course you will identify the types, sources, and challenges of healthcare data along with methods for selecting and preparing data for analysis. **Prerequisite: None**

HRM201 Human Resource Management I 4.5

This introductory course concentrates on human resource management issues confronting organizations. These issues include organizational practices and legal aspects of recruitment, selection, training, orientation, and performance appraisals. Labor relations are discussed. **Prerequisite: MGT101**

HRM202 Organizational Theory and Behaviour 4.5

This course analyses both the formal and informal aspects of the management process. Topics include human behaviour in an organizational environment, individual behaviour patterns, superior/subordinate relationships, group dynamics, communication, motivation and decision-making, and the impact of innovation and change on the organization. **Prerequisite: None**

HRM203 Managing People in Direct Sales 4.5

In this course you will learn some essential strategies for managing individuals, teams, leading and enhancing team performance. Important management skills such as communication skills and negotiation skills will be covered in this people focussed management course. This will highlight the importance of knowing how to communicate more effectively with your team and how to motivate and handle difficult individuals. **Prerequisite: None**

HRM204 Human Resource Management in Network Marketing 4.5

This course covers areas such as recruitment and selection, training and developing and managing conflict at work. These are an important part of the management process in all organisations. This course will help you develop the skills for a variety of marketing and management careers. You'll understand customer requirements, added-value products and services and the role of communications in customer satisfaction. **Prerequisite: None**

HRM301 Managing People 4.5

The aim of this course is to provide an understanding of the role of managers in managing people, arguably the most important resource in an organization. The course describes the strategies managers can adopt to manage people, people-organizational linkages and impact of dynamic changes on these areas. **Prerequisite: None.**

HRM302 Diversity in the Workplace 4.5

This course examines the management of a diverse workforce and the benefits of creating this diversity. Topics include understanding human behaviour in an organization, changing marketplace realities, employment systems, affirmative action, behaviour modification for employees and other topics related to a multicultural workforce. **Prerequisite: None.**

HRM303 Staffing and Employment 4.5

This course examines current issues affecting staffing and employment practices and the impact on the organization's ability to compete in the marketplace, to develop and maintain a successful workforce, and comply with the various regulations governing staffing and employment practices are discussed. Major topics include technical issues involved in developing and implementing selection programs within organizations; how to achieve a successful person/job and governing staffing / employment practices, and staffing procedures, policies, techniques and problems, and the role of public policy on staffing/ employment practices. **Prerequisite: MGT201**

HRM304 Labor Management Relations 4.5

The historical, current and legal analysis of labor relations in the India and its impact on an organization's ability to compete in the marketplace, to develop and maintain a successful workforce, and comply with the various statutory and common law regulations governing labor/ management relations are discussed in this course. **Prerequisite: None.**

HSM301 Hospital Service Operations 4.5

This course provides foundation in Hospital Service Operations to provide the students with the managerial knowledge and skills to organize and lead a health care institutes. Furthermore, students will explore various concepts and theories of leadership and how these might be applied to and impact management functions in Hospital settings. **Prerequisite: None**

HSM302 Hospital Quality Management and Assurance 4.5

This course provides healthcare practitioners and others with an introduction to the knowledge and skills needed to lead patient safety and quality improvement initiatives at the micro and macro levels. Participants will explore the foundations of health care quality and the science underlying patient quality improvement, design and select effective health care measures, analyze patient safety problems and processes using tools such as human factors analysis, apply systematic approaches including the Plan-Do-Study-Act (PDSA) model to address quality improvement challenges, and learn strategies to lead a culture of change. **Prerequisite: None**

HSM303 Information Technology in Hospitals 4.5

Information Technology and its application to hospitality sectors from managerial and strategic perspectives. Survey computer applications, products and trends in gathering, analyzing, storing and communicating information within hospitality sectors. Help to prepare students to meet the challenges associated with Hospitality Information Systems within the Hospitality Industry. Gain an insight into workings of computer systems used in the hospitality industry. Identify the use and knowledge in the significance of information technology to an enterprise. **Prerequisite: None**

HSM304 Recent Trends in Hospital Systems 4.5

Special topics courses are developed to cover emerging issues or specialized content not represented in the main curriculum.

HUM101 Critical and Creative Thinking Skills 4.5

This course provides an introduction to critical thinking, informal logic, and a small amount of formal logic. Its purpose is to provide you with the basic tools of analytical reasoning, which will give you a distinctive edge in a wide variety of careers and courses of study. **Prerequisite: None**

INT300 Internship (Co-op) I 4.5

Course offers students opportunity to earn academic credit for off-campus or on-campus internship experience with formal reflection on professional field. This can also refer to a certain disciplinary work with a faculty member, typically during the Fall or Spring. **Prerequisite: None**

INT301 Internship (Co-op) II 4.5

Course offers students opportunity to earn academic credit for off-campus or on-campus internship experience with formal reflection on professional field. This can also refer to a certain disciplinary work with a faculty member, typically during the Fall or Spring. The student must have gone through the previously assigned internship/ Co-op. **Prerequisite: None**

IFT401 Information Systems Management 4.5

Professionals in this role are responsible for analyzing a company's need for technology, maintaining cybersecurity and network security and creating and adhering to budgets for technology. The field of information systems management has many opportunities for advancement, including positions such as chief information officers (CIOs), IT directors, chief technology officers (CTOs) or chief data officers (CDOs). According to the BLS, for those in the computer and information systems management field. **Prerequisite: None**

IFT402 Network Administration 4.5

A career in network administration consists of managing and maintaining internet networks for companies and organizations. Professionals in this field ensure that intranet and internet network segment systems, local area networks (LAN) and wide area networks (WAN) function correctly. They also resolve any network issues, help colleagues with training and install any needed hardware for network use. **Prerequisite: None**

IFT403 Software Development, Engineering Systems 4.5

This course focuses on programming and the development of sophisticated applications for use in public and private entities. This area dovetails with the computer science field of coding. Specialists use programming languages to build applications and programs that address the specific needs of the client. **Prerequisite: None**

IFT404 Web and Application Developments 4.5

This course focuses on programming and the development of sophisticated websites and applications. This area overlaps with the computer science field of coding or programming. Web and application development specialists use programming languages to build software program solutions for certain identified IT problems. **Prerequisite: None**

IFT405 Cybersecurity, Digital Forensic and System Security 4.5

The cybersecurity course centers around the security of applications, data, and networks, as well as the proper management of information technology. There is much overlap with digital investigations, as one of the main functions of this specialization is a type of quality assurance. **Prerequisite: None**

IFT406 Information Technology Entrepreneurship 4.5

For this course, managerial and entrepreneurial skills are needed, as well as an instinct for thinking ahead of the curve. Information technology business students learn how to launch and maintain a new enterprise in the tech industry. **Prerequisite: None**

LAW101 Business Law 4.5

This course is designed to provide the student with knowledge of the legal environment in which a consumer and businesses operates, and to provide the student with knowledge of legal principles.

LAW102 Regulatory Framework, guidelines, rules and acts in Direct Sales 4.5

This course is an overview of the legal and ethical issues related to marketing strategy. The course explores the legal and ethical issues raised by the marketing function, from product development to distribution and promotion, through sales and service. The goal of the course is to provide students with the necessary tools to make informed decisions when confronted with legal questions regarding the marketing function. The emphasis is on the prevention of legal liability and disputes and the use of the law to create orderly, defensible business decision-making. **Prerequisite: None**

MAS301 Communication Research 4.5

Introduces students to quantitative and qualitative communication research methods to enable them to become competent evaluators, designers, and authors of research. Teaches the fundamental principles of communication research, providing learners with the knowledge base and experience to answer questions in the practice of professional communication. **Prerequisite: None**

MAS302 Media Laws and Ethics 4.5

The course introduces students to a broad range of specific ethical and legal issues pertinent to various aspects of the media. The course will investigate and analyse techniques for dealing with moral problems and moral dilemmas that students may encounter in their professional lives. **Prerequisite: None**

MAS303 Principles of Mass Communication 4.5

This course provides an overview of theories to describe and explain media communication. The course will look at several perspectives on media and how they are translated into contemporary research efforts. Specifically, the course deals with the communication field from the perspectives of content and language, media and society, audiences and effects, and media organizations. **Prerequisite: None**

MAS304 Print & Electronic Media 4.5

This course introduces print media and how news and information is delivered through printed publications. Students also understand how electronic media is used to create, deliver and access news and information through digital platforms. **Prerequisite: None**

MGT101 Introduction to Business 4.5

This course provides a background on business and management. Students discuss human relations, organizational structure, communications, technology in business, and strategic planning. **Prerequisite: None**

MGT102 Introduction to Business in Direct Sales 4.5

This course provides a background on business and management. Students discuss human relations, organizational structure, communications, technology in business, and strategic planning in Direct Sales. An overview of the forces within the business environment (i.e., globalization, economics,

government, and society), and an introduction to the key functional areas within the firm, such as marketing, operations, accounting, finance, management, and human resources. **Prerequisite: None**

MGT201 Business Fundamentals 4.5

This course is an introduction to a broad range of business concepts, practices, and theories relevant to today's global business environment. Students examine the interrelationship among functional areas of a business enterprise; specifically, human resources, operations management, marketing and sales, and accounting and finance. **Prerequisite: None**

MGT202 International Business 4.5

This course discusses how the global economic, political, and cultural environment affects domestic and international businesses, international opera-ions and dependency, and public policy decisions. **Prerequisite: MGT101**

MGT203 Design Thinking 4.5

In this course, we provide an overview of design thinking and work with a model containing four key questions and several tools to help you understand design thinking as a problem-solving approach. **Prerequisite: None**

MKT101 Sales and Marketing 4.5

This course introduces the student to effective methods for marketing products and services. Direct mail, print time and other advertising techniques are discussed. Problem solving relative to customer relations is addressed. Consumer profiles, organizational personalities, and demographics are presented as components of market research and analysis. **Prerequisite: None.**

MKT102 Sales and Marketing with Direct Sales 4.5

Sales and Marketing with Direct sales course provides an introduction to digital and offline direct marketing. The course covers all major direct marketing media: direct mail, broadcast, print, catalog etc. with a special emphasis on the use of different platforms such as email, SMS text, paid search, Mobile apps and social media. Student will learn how databases to be created and accessed for the direct marketing. Students will learn measurability and accountability of direct marketing and its relationship to the 4P's. **Prerequisite: None.**

MKT103 Networking and Building Relationships 4.5

This course will help learners increase personal and team value by teaching them to cultivate a network of associates they can contact for information, advice, and coaching. Learners identify what information and expertise they need, identify who can provide it, practice asking for help, and then learn techniques for maintaining strong working relationships. **Prerequisite: None.**

MKT104 Role of Internet Marketing in Multi-level Marketing 4.5

Multi-Level Marketing is a very popular business model in the Western countries. It is a kind of hybrid of the method of distribution of goods and the method of building a sales network. It is one of the safest (carries a very low risk) ways of conducting a business activity. The course provides all the necessary information about MLM that includes understanding the MLM model, its legality, advantages, disadvantages, situation and opportunities so that you can improve your skills and learn the secrets multi-level marketing etc. P**rerequisite: None.**

MKT201 Consumer Behavior 4.5

This course focuses on understanding and predicting consumer behavior by integrating theories from psychology, sociology, anthropology and economics. Emphasis will be on how behavior is shaped by internal and external influences. P**rerequisite: None.**

MKT202 Negotiation Skills 4.5

The course is aimed at developing analytical and communication skills that are necessary for successful business negotiations. The negotiation is described as a complex three-stage process which consists of preparation, negotiating, and post-negotiation implementation and evaluation. The course combines both theoretical knowledge of leading negotiation scholars and practical experience through learning by doing. P**rerequisite: None.**

MKT301 Business to Business Marketing 4.5

This course develops the students' understanding of the various concepts in organizational buying and enables them to comprehend the buying processes of business markets. With value created and delivered in the marketplace as its cornerstone, this curse equips the students with necessary marketing tools to deal with issues related to business markets. **Prerequisite: None**

MKT302 Buyer Behaviour 4.5

This course focuses on understanding and influencing consumer perceptions and buying decisions. Integrated into the process is the role of marketing research and the basic methods and techniques needed to interpret information relevant to targeting markets, positioning products, and designing effective marketing communications. **Prerequisite: None**

MKT303 Marketing on the Internet 4.5

This course will provide students with the skills and knowledge needed to generate viable business via the internet. This course explores strategic directions, branding, business cases, and life-cycle management for developing products for a digital world. **Prerequisite: None**

MKT304 Marketing Research 4.5

This course covers basic research methodology applied to marketing issues. Students study methods and techniques for collection, analysis, and interpretation of primary and secondary data for customer and business marketing. **Prerequisite: None.**

MKT305 Sales Skills

This course provides a comprehensive introduction to successful selling. Students learn customer-focused selling techniques as well as new skills for starting a sales conversation, building client rapport, selling a particular product or service and closing the sale. **Prerequisite: None.**

MKT306 Marketing Channels

course intends to provide you with a more structured approach to the organisation of sales channels and the ability to build constructive and disciplined relationships with channel partners. Through precise references to the most modern managerial models in this field, the course will help you to more accurately develop marketing channel plans, enabling your organisation to increase sales, margins and the levels of collaboration with channel partners. **Prerequisite: None.**

MKT307 Supportive and Critical Factors in Direct Selling

Students will learn the different factors in Direct Selling. **Prerequisite: None**.

MOC301 Responsive Mobile Platform 4.5

Gain the necessary skills for responsive and mobile website design that fully harness sophisticated capabilities of web browsers on mobile devices. In this training course, you learn how to define the elements of Responsive Wed Design (RWD), implement mobile frameworks, enhance site functionality, and design an optimal experience for mobile interaction. **Prerequisite: None**

MOC302 Mobile Application Development Using Android 4.5

This project-oriented course examines the principles of mobile application design and development. Students will learn application development on the Android platform. Course work will include project conception, design, implementation, and pilot testing of mobile phone software applications, using weight loss and physical activity motivation health applications as the target domain. **Prerequisite: None.**

MOC303 Mobile Application Development Using IOS 4.5

This Specialization covers the fundamentals of iOS application development in the Swift programming language. You'll learn to use development tools such as XCode, design interfaces and interactions and evaluate their usability, and integrate camera, photo, and location information to enhance your app. **Prerequisite: None.**

MOC304 Enterprise Mobile Application Development 4.5

To develop the technical knowledge, specialised software development skills for developing mobile applications on various platforms Limitations, strengths and opportunities of development for mobile devices. **Prerequisite: None.**

MTH201 Business Mathematics 4.5

This course focuses on the fundamental skills needed to understand and apply mathematical tools in today's business world. The course is designed to Strengthen students' understanding of basic mathematical concepts and mathematical operations. Provide extensive practice in applying basic mathematical skills. Demonstrate how mathematical reasoning can be used in personal and professional decision making. **Prerequisite: None**

MTH202 Discrete Mathematics 4.5

This course covers elementary discrete mathematics for computer science and engineering. It emphasizes mathematical definitions and proofs as well as applicable methods. **Prerequisite: MTH201**

MTH203 Calculus and Algebra 4.5

Calculus is the Mathematics of Change. Wherever there is motion or growth, Calculus helps us understands the changes that occur. In addition, you can use Calculus to study geometric properties of curves, figure, solids etc. Understanding functions is extremely important for this course. **Prerequisite: None**

OPS201 Production and Operations Management 4.5

This course addresses the management of operations in manufacturing and service organizations. Diverse activities such as production process, raw materials purchase, scheduling, and quality control are discussed. **Prerequisite: MGT101**

PCC101 Skills for Lifelong Learning 4.5

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University Library and learn how to access its resources successfully. P**rerequisite: None**

PCC102 Environmental Science: Corporate Sustainability 0.5

This course investigates the impact of a variety of factors both human and natural that affect the environment. Through the study of authentic environmental situations, students engage in investigations and labs to determine causal relationships and suggest remedies. **Prerequisite: None**

PCC103 Harvard Certification - Ethics at Work 4.5

In this course, students will learn what workplace ethics are - and aren't. They will investigate how an ethical culture drives business success, explore a practical method for making an ethical decision, and discover how to foster integrity and apply ethics across borders.

PCC104 Positive Intelligence 4.5

Most attempts at positive change fail because we stop at insight and don’t build habits. Sustained change towards a more positive mind requires laying down neural pathways to form new habits through consistent daily practice. And that’s what our program design empowers you to do.

PHL201 Indian Ethos of Mindful Leadership 4.5

Mindful Leadership supports participants towards the establishment of effective, sustainable leadership with a particular focus on self-awareness and self-management. It prepares participants for critical reflection, self-awareness, managing relationships and effective communication. **Prerequisite: None**

PRG101 Python Programming powered by IBM 4.5

Python is a language with a simple syntax, and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. While it is easy for beginners to learn, it is widely used in many scientific areas for data exploration. **Prerequisite: None**

PRG102 Data Structures and Algorithms using Java 4.5

In this course, you will use and analyze data structures that are used in industry-level applications, such as linked lists, trees, and hash tables and how these data structures make programs more efficient and flexible. You will apply asymptotic Big-O analysis to describe the performance of algorithms and evaluate which strategy to use for efficient data retrieval, addition of new data, deletion of elements, and/or memory usage. **Prerequisite: None**

PRG103 Object Oriented Programming using C++ 4.5

This course provides in-depth coverage of object-oriented programming principles and techniques using C++. Topics include classes, overloading, data abstraction, information hiding, encapsulation, inheritance, polymorphism, file processing, templates, exceptions, container classes, and low-level language features. **Prerequisite: None**

PRG104 Software Engineering 4.5

This course provides an overview of web engineering concepts, methods, and technologies. The course explores the requirements engineering for web applications, testing, metrics, operations and maintenance of web applications, security, and project management. **Prerequisite: None**

PSY202 The Science of Happiness 4.5

This course provides an introduction to the relatively new field of positive psychology. Positive psychology calls for as much focus on strength as on weakness, as much interest in building the best things in life as in repairing the worst, and as much attention to fulfilling the lives of healthy people as to healing the wounds of the distressed. **Prerequisite: None**

QNT201 Quantitative Methods for Decision Making 4.5

In this course participants will be introduced to the theory and practice of decision making methods and tools in a quantitative context. During the course, participants will learn the meaning and the fundamentals of statistics and how it impacts decision making. The course will help participants appreciate the importance of understanding statistics as the foundation of all other techniques. **Prerequisite: None**

RES201 Research Methods 4.5

The course focuses on methods for the conduct of research and development projects. Specifically, students learn about the scientific method, as well as research/design requirements and objectives. Course work involves qualitative, quantitative, and case studies; performance metrics; design 57 procedures and control; sources of error and bias. In addition, evaluation tools and formal validation methods are discussed. **Prerequisite: None**

SCM301 Supply Chain Service and Operations Management

This course focuses on management and improvement of supply chain processes and performance. It will be valuable for students who would like to pursue a career in consulting or take a position in operations, marketing or finance functions in a manufacturing or distribution firm. We explore important supply chain metrics, primary tradeoffs in making supply chain decisions, and basic tools for effective and efficient supply chain management, production planning and inventory control, order fulfilment and supply chain coordination. **Prerequisite: None**

SCM302 Supply Chain Risk Management

This course will equip and develop procurement and supply chain professionals with skills that enable them to operate diligently and effectively with their supply base, mitigating any risks and maximizing all opportunities to gain a competitive advantage in their marketplace. **Prerequisite: None**

SCM303 Warehouse Control & Material Management

To introduce the student to the concept, functions, objectives, and importance of warehouse control and material management function in an organization. Also, to give him an elementary idea of material management linkages with other areas of management, supply chain management and production processes. **Prerequisite: None**

SCM304 Logistic Information Systems

The purpose of this course is to introduce to students the applications and usage of Information Technology in the Logistics Sector. The course will help the students to understand the basic concepts

of Information Systems and appreciate the available IT solutions along with the relevant business processes. **Prerequisite: None**

TAX147 Individual and Corporate Taxes 4.5

This course is designed to make the students aware of the corporate tax laws of India. Understanding the corporate tax laws and use it for tax planning is the basic objective of the course. **Prerequisite: None**

TEC201 Management Information Systems 4.5

This course will focus on information system which supports business decisions, internal business processes, customer relations, and interaction with suppliers. It deals with the organizational foundations of such systems, their strategic role, and the organizational and management changes driving electronic commerce, electronic business and the emerging digital firm. **Prerequisite: None**

UOE100/200/300 Open Electives I 4.5

Students choose a course from a university wide approved list of courses across different fields to increase their breadth of knowledge through interdisciplinary learning. **Prerequisite: None**

UOE100/200/300 Open Electives II 4.5

Students choose a course from a university wide approved list of courses across different fields to increase their breadth of knowledge through interdisciplinary learning. **Prerequisite: None**

Graduate Programs

Section Contents

School of Business Administration

Master's degree: Business Administration

The mission of the Master of Business Administration program is to prepare students for careers in various aspects of business, management, and leadership in the private and public sectors. The curriculum incorporates the industry reliance on information technology, recognition of the international business environment, contemporary issues affecting business enterprises, and the need for companies to undergo frequent transformation. The program assists students with developing and nurturing their analytical, technical, and interpersonal skills. Students acquire a comprehensive foundation in the fundamentals of business, the global environment in which they will function, and the analytical tools for intelligent decision making. Students gain added functional expertise with an option to select specialization courses.

MBA

8 Foundation Courses x 4.5 credit hours	= 36 credit hours
10 Core courses x 4.5 credit hours	= 45 credit hours
4 common courses x 4.5 credit hours	= 18 credit hours
2 Internship/Co-op Capstone courses x 4.5 credit hours	= 13.5 credit hours
COW and ECA&GI x 0.5	= 1.5 credit hours
4 Professional Certification Courses (PCC) x 0.5 credit hours	= 2 credit hours
25 Total courses x 4.5 credit hours + 7 PCC x 4.5 credit hours	= 116 Credit Hours

This program typically takes 2 years to complete for students enrolled full time.

Foundation and Language Courses

Code	Course Name	Credit
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
MGT201	Business Fundamentals	4.5
MTH201	Business Mathematics	4.5
OPS201	Production and Operations Management	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
MGT203	Design Thinking	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**36**

Core Requirements

Course Code	Course Name	Credits
ACC501	Accounting for Managerial Decision Making	4.5
ENT501	Entrepreneurship and Venture Management	4.5
HRM501	Human Resource Management	4.5
FIN501	Corporate Finance	4.5
MGT501	International Business	4.5
MGT507	Business Transformation	4.5
MKT502	Strategic Business Marketing	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC511	Data Visualization and Business Intelligence	4.5
Total Requirements		**45**
Common Courses (Choose any four courses)		
MKT601	Electronic Commerce: Business Models & Strategies	4.5
MKT602	Influencer Marketing	4.5
FIN601	Security Analysis and Portfolio Management	4.5
FIN602	Financial Statement Analysis	4.5
HRM601	Change Management	4.5
HRM602	Industrial relations and Labor laws	4.5
ENT601	International Economics	4.5
ENT604	Business Plan for the New Venture	4.5
Total Requirements		**18**
Internship/Project (Co-op)/		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
INT601	Internship (Co-Op) II	4.5
COW501	Community Welfare	0.5
PCC301	Extra-Curricular & General Interest	0.5
PCC302	Career Preparation Courses /Alumni Mentoring	0.5
Total Requirements		**15**
Professional Core Courses		

PCC101	Skills for Lifelong Learning	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT100	Advanced Excel/Word Training	0.5
Total Requirements		**2.0**
Summary of Total Requirements		
Total Foundation Courses		36
Total Core Requirements		45
Total Common Requirements		18
Total Co-Op Requirements		15
Total Professional Course Requirement		2
Master of Business Administration Total Credits Required for Graduation		**116**

MBA with Specialization (Business Analytics; Digital Marketing; Mass Media; Entrepreneurship; Finance; HRM; Marketing; Supply Chain Management)

8 Foundation Courses x 4.5 credit hours	= 36 credit hours
10 Core courses x 4.5 credit hours	= 45 credit hours
4 Specialization courses x 4.5 credit hours	= 18 credit hours
2 Internship/Co-op Capstone courses x 4.5 credit hours	= 13.5 credit hours
COW and ECA&GI x 0.5	= 1.5 credit hours
4 Professional Certification Courses (PCC) x 0.5 credit hours	= 2 credit hours
25 Total courses x 4.5 credit hours + 7 PCC x 4.5 credit hours	= 116 Credit Hours

This program typically takes 2 years to complete for students enrolled full time.

Foundation and Language Courses

Code	Course Name	Credit
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
MGT201	Business Fundamentals	4.5
MTH201	Business Mathematics	4.5
OPS201	Production and Operations Management	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
MGT203	Design Thinking	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**36**

Core Requirements

Course Code	Course Name	Credits
ACC501	Accounting for Managerial Decision Making	4.5
ENT501	Entrepreneurship and Venture Management	4.5
HRM501	Human Resource Management	4.5
FIN501	Corporate Finance	4.5
MGT501	International Business	4.5
MGT507	Business Transformation	4.5
MKT502	Strategic Business Marketing	4.5

QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TEC511	Data Visualization and Business Intelligence	4.5
Total Requirements		**45**
Business Analytics (Four Courses Required)		
BAL601	Basic Business Analytics using R/Python	4.5
BAL602	Data Mining for Intelligence Management	4.5
BAL603	Big Data Analysis	4.5
BAL604	Text Analytics	4.5
Total Requirements		**18**
Digital Marketing (Four Courses Required)		
DGM601	Digital Journey with Brand Management	4.5
DGM602	Social Media Optimization	4.5
DGM603	Web and Test Analytics	4.5
DGM604	E-Commerce Analytics	4.5
Total Requirements		**18**
Mass Media (Four Courses Required)		
MAS601	Data Journalism	4.5
MAS602	Investigative Reporting	4.5
MAS603	Public Relations and Events	4.5
MAS604	Media, CSR & Sustainable Development	4.5
Total Requirements		**18**
Entrepreneurship (Four Courses Required)		
ENT601	International Economics	4.5
ENT602	Growth Strategies for Emerging Companies	4.5
ENT603	Growth Strategies for Emerging Markets	4.5
ENT604	Business Plan for the New Venture	4.5
Total Requirements		**18**
Finance (Four Courses Required)		
FIN601	Investments	4.5
FIN602	Financial Statement Analysis	4.5

FIN603	Financial Modelling and Decision Making	4.5
FIN604	Financial Risk Management	4.5
Total Requirements		**18**
Human Resource Management (Four Courses Required)		
HRM501	Change Management	4.5
HRM502	Industrial Relations and Labor Laws	4.5
HRM503	Performance Management	4.5
HRM504	Compensation and Benefit Management	4.5
Total Requirements		**18**
Marketing (Four Courses Required)		
MKT601	Electronic Commerce: Business Models & Strategies	4.5
MKT602	Influencer Marketing	4.5
MKT603	International Marketing Management	4.5
MKT604	Internet marketing Strategies	4.5
Total Requirements		**18**
Supply Chain Management (Four Courses Required)		
SCM601	Supply Chain Management Operations	4.5
SCM602	Supply Chain Inventory Management	4.5
SCM603	Supply Chain Business Process Design	4.5
FIN605	Financial Management II	4.5
Total Requirements		**18**
Hospital Management (Four Courses Required)		
HSM601	Healthcare Environment & Management	4.5
HSM602	Health Care Laws, Ethics and Medical Terminology	4.5
HSM603	Hospital Operations Management	4.5
HSM604	Patient Care Management	4.5
Total Requirements		**18**
Hotel Management (Four Courses Required)		
HTM601	Hospitality & Tourism Management	4.5
HTM602	Conference & Event Management	4.5
HTM603	Food & Beverage Management and Control	4.5

HTM604	Hospitality Brand Management	4.5
Total Requirements		**18**
Internship/Project (Co-op)/		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
INT601	Internship (Co-Op) II	4.5
COW501	Community Welfare	0.5
PCC301	Extra-Curricular & General Interest	0.5
PCC302	Career Preparation Courses /Alumni Mentoring	0.5
Total Requirements		**15**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT100	Advanced Excel/Word Training	0.5
Total Requirements		**2.0**
Summary of Total Requirements		
Total Foundation Courses		36
Total Core Requirements		45
Total Specialization Requirements		18
Total Co-Op Requirements		15
Total Professional Course Requirement		2
Master of Business Administration Total Credits Required for Graduation		**116**

Executive MBA

The MBA (Executive) programme at KKMU has been designed for the students with the minimum of 2 years full time work experience after graduation in a registered firm/ company / industry/ educational/ government, autonomous organisations.

This programme has been tailor made for professionals desirous of acquiring a clear advantage in terms of knowledge and skills for their growth and development.

4 Foundation Courses x 4.5 credit hours	= 18 credit hours
6 Core courses x 4.5 credit hours	= 27 credit hours
2 common courses x 4.5 credit hours	= 9 credit hours
Internship/Co-op Capstone courses x 4.5 credit hours	= 13.5 credit hours
15 courses x 4.5 credit hours	= 67.5 credit hours

This program typically takes 1 years to complete for students enrolled full time.

Foundation and Language Courses

Code	**Course Name**	**Credit**
COM301	Business Communication	4.5
HUM201	Critical and Creative Thinking Skills	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**18**

Core Requirements (6 Courses Required)

Number	**Course Name**	**Credits**
ACC501	Accounting for Managerial Decision Making	4.5
ENT501	Entrepreneurship and Venture Management	4.5
HRM501	Human Resource Management	4.5
FIN501	Corporate Finance	4.5
MGT501	International Business	4.5
MGT507	Business Transformation	4.5
MKT502	Strategic Business Marketing	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5

TEC511	Data Visualization and Business Intelligence	4.5
Total Requirements		**27**
Common Courses (2 courses Required)		
Number	**Course Name**	**Credits**
FIN601	Security Analysis and Portfolio Management	4.5
FIN602	Financial Statement Analysis	4.5
MKT601	Electronic Commerce: Business Models & Strategies	4.5
MKT602	Influencer Marketing	4.5
HRM602	Industrial Relations and Labor laws	4.5
HRM603	Performance Management	4.5
Total Requirements		**9.0**
Internship/Project (Co-op)/Free Electives		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
INT601	Internship (Co-Op) II	4.5
Total Requirements		**13.5**
Summary of Total Requirements		
Total Foundation Courses		18
Total Core Requirements		27
Total Common Course Requirement		9
Total Co-Op Requirements		13.5
Executive MBA Total Credits Required for Graduation		**67.5**

M.Com (H)

7 Foundation Courses x 4.5 credit hours	= 31.5 credit hours
10 Core courses x 4.5 credit hours	= 45 credit hours
6 Specialization courses x 4.5 credit hours	= 27 credit hours
2 Internship/Co-op Capstone courses x 4.5 credit hours	= 13.5 credit hours
4 Professional Certification Courses (PCC) x 0.5 credit hours	= 2 credit hours
26 Total courses x 4.5 credit hours + 4 PCC x 0.5 credit hours	= 119 Credit Hours

This program typically takes 2 years to complete for students enrolled full time.

Foundation and Language Courses

Code	**Course Name**	**Credit**
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
MGT201	Business Fundamentals	4.5
MTH201	Business Mathematics	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
MGT203	Design Thinking	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**31.5**

Core Requirements

Course Code	**Course Name**	**Credits**
ACC502	Advanced Managerial Accounting	4.5
ECO501	Managerial Economics	4.5
ENT501	Entrepreneurship and Venture Management	4.5
FIN501	Corporate Finance	4.5
FIN502	Financial Planning	4.5
FIN503	Marketing for Financial Services	4.5
MGT507	Business Transformation	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TAC501	Corporate Tax Structure and Planning	4.5

Total Requirements		**45**
Common Courses (Six Courses Required)		
ACC601	Accounting Theory and Financial Reporting	4.5
ACC602	Cost Estimation and Control	4.5
FIN601	Security Analysis and Portfolio Management	4.5
FIN606	Investment Analysis	4.5
FIN607	Debt Market	4.5
FIN608	Financial Derivatives	4.5
FIN610	International Financial Systems	4.5
FIN611	International Financial Management	4.5
Total Requirements		**27**
Internship/Project (Co-op)		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
INT601	Internship (Co-Op) II	4.5
Total Requirements		**13.5**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT100	Advanced Excel/Word Training	0.5
Total Requirements		**2.0**
Summary of Total Requirements		
Total Foundation Courses		31.5
Total Core Requirements		45
Total Majors Requirements		27
Total Co-Op Requirements		13.5
Total Professional Course Requirement		2
Master of Commerce Total Credits Required for Graduation		**119**

M.Com with Specialization (Accounts and Finance; Financial and Stock Markets)

7 Foundation Courses x 4.5 credit hours	= 31.5 credit hours
10 Core courses x 4.5 credit hours	= 45 credit hours
6 Specialization courses x 4.5 credit hours	= 27 credit hours
2 Internship/Co-op Capstone courses x 4.5 credit hours	= 13.5 credit hours
4 Professional Certification Courses (PCC) x 0.5 credit hours	= 2 credit hours
26 Total courses x 4.5 credit hours + 4 PCC x 0.5 credit hours	= 119 Credit Hours

This program typically takes 2 years to complete for students enrolled full time.

Foundation and Language Courses

Code	**Course Name**	**Credit**
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
MGT201	Business Fundamentals	4.5
MTH201	Business Mathematics	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
MGT203	Design Thinking	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**31.5**

Core Requirements

Course Code	**Course Name**	**Credits**
ACC502	Advanced Managerial Accounting	4.5
ECO501	Managerial Economics	4.5
ENT501	Entrepreneurship and Venture Management	4.5
FIN501	Corporate Finance	4.5
FIN502	Financial Planning	4.5
FIN503	Marketing for Financial Services	4.5
MGT507	Business Transformation	4.5
QNT201	Quantitative Methods for Decision Making	4.5
RES201	Research Methods	4.5
TAC501	Corporate Tax Structure and Planning	4.5

Total Requirements		**45**
Specialization in Accounts and Finance (Six Courses Required)		
ACC601	Accounting Theory and Financial Reporting	4.5
ACC602	Cost Estimation and Control	4.5
ACC603	Strategic Cost Analysis and Performance Evaluation	4.5
ACC604	Advanced Corporate Accounting and Accounting Standards	4.5
FIN609	International Finance	4.5
FIN611	International Financial Management	4.5
Total Requirements		**27**
Specialization in Financial and Stock Markets (Six Courses Required)		
FIN601	Security Analysis and Portfolio Management	4.5
FIN606	Investment Analysis	4.5
FIN607	Debt Market	4.5
FIN608	Financial Derivatives	4.5
FIN610	International Financial Systems	4.5
FIN611	International Financial Management	4.5
Total Requirements		**27**
Internship/Project (Co-op)		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
INT601	Internship (Co-Op) II	4.5
Total Requirements		**13.5**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT100	Advanced Excel/Word Training	0.5
Total Requirements		**2.0**
Summary of Total Requirements		
Total Foundation Courses		31.5
Total Core Requirements		45

Total Specialization Requirements	27
Total Co-Op Requirements	13.5
Total Professional Course Requirement	2
Master of Commerce Total Credits Required for Graduation	**119**

School of Sciences

Our School of Sciences often plays a pivotal role in finding answers to real world issues. Our curriculum is innovative, career-focused and application-oriented. It has a fine balance of theory, practical and projects. The learnings allow you to solve problems demanded by Industry. Our programs train you to be innovators to solve real world problems.

MCA

7 Foundation Courses x 4.5 credit hours	= 31.5 credit hours
13 Core Requirements x 4.5 credit hours	= 58.5 credit hours
4 Common Courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op Capstone courses x 4.5 credit hours	= 9.0 credit hours
4 Professional Certification Courses (PCC) x 0.5 credit hours	= 2 credit hours
26 courses x 4.5 credit hours + 4 PCC x 0.5 credit hours	= 119 Credit Hours

This program typically takes 3 years to complete for students enrolled full time.

Foundation and Language Courses

Code	**Course Name**	**Credit**
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
MGT201	Business Fundamentals	4.5
MTH201	Business Mathematics	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
MGT203	Design Thinking	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**31.5**

Core Requirements

Course Code	**Course Name**	**Credits**
CST505	Advanced Data Communication and Networks	4.5
PRG504	Advanced Data Structures and Algorithm using Java	4.5
CST506	Automata Theory	4.5
CST507	Advanced Operating Systems	4.5
PRG505	Advanced Software Engineering	4.5
PRG506	Computer Graphics	4.5

MTH501	Advanced Discrete Mathematics	4.5
QNT501	Statistical Techniques	4.5
PRG501	Design and Analysis of Algorithms	4.5
PRG502	Object Oriented Analysis and Design	4.5
CST501	Advanced Network Security	4.5
CST502	Wireless Computing	4.5
CST508	Advanced Database Management Systems	4.5
Total Requirements		**58.5**
Common Courses (Choose any four courses)		
MOC601	Application Development using Python	4.5
MOC602	Advanced Web Technologies	4.5
MOC603	Internet of Things	4.5
MOC604	Computer Vision*	4.5
DAL601	Statistics for Data Science	4.5
DAL602	Optimization for Machine Learning	4.5
DAL603	Deep Learning	4.5
DAL604	Communicating Data and Analysis	4.5
Total Requirements		**18**
Internship/Project (Co-op)		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC101	Skills for Lifelong Learning	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT100	Advanced Excel/Word Training	0.5
Total Requirements		**2.0**
Summary of Total Requirements		
Total Foundation Courses		31.5
Total Core Requirements		58.6

Total Common Courses Requirements	18
Total Co-Op Requirements	9.0
Total Professional Course Requirement	2.0
Master of Computer Application Total Credits Required for Graduation	**119**

MCA with Specialization (Data Analytics; Mobile Computing)

7 Foundation Courses x 4.5 credit hours	= 31.5 credit hours
13 Core Requirements x 4.5 credit hours	= 58.5 credit hours
4 Specialization Courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op Capstone courses x 4.5 credit hours	= 9.0 credit hours
4 Professional Certification Courses (PCC) x 0.5 credit hours	= 2 credit hours
26 courses x 4.5 credit hours + 4 PCC x 0.5 credit hours	= 119 Credit Hours

This program typically takes 3 years to complete for students enrolled full time.

Foundation and Language Courses

Code	**Course Name**	**Credit**
ENG201	The Art of Conversation II	4.5
COM301	Business Communication	4.5
MGT201	Business Fundamentals	4.5
MTH201	Business Mathematics	4.5
PHL201	Indian Ethos and Mindful Leadership	4.5
MGT203	Design Thinking	4.5
PSY202	The Science of Happiness	4.5
Total Requirements		**31.5**

Core Requirements

Course Code	**Course Name**	**Credits**
CST505	Advanced Data Communication and Networks	4.5
PRG504	Advanced Data Structures and Algorithm using Java	4.5
CST506	Automata Theory	4.5
CST507	Advanced Operating Systems	4.5
PRG505	Advanced Software Engineering	4.5
PRG506	Computer Graphics	4.5
MTH501	Advanced Discrete Mathematics	4.5

QNT501	Statistical Techniques	4.5
PRG501	Design and Analysis of Algorithms	4.5
PRG502	Object Oriented Analysis and Design	4.5
CST501	Advanced Network Security	4.5
CST502	Wireless Computing	4.5
CST508	Advanced Database Management Systems	4.5
Total Requirements		**58.5**

Specializations Requirements

Mobile Computing (Four Courses Required)

Course Code	**Course Name**	**Credits**
MOC601	Application Development using Python	4.5
MOC602	Advanced Web Technologies	4.5
MOC603	Internet of Things	4.5
MOC604	Computer Vision*	4.5
Total Requirements		**18**

Data Analytics (Four Courses Required)

Course Code	**Course Name**	**Credits**
DAL601	Statistics for Data Science	4.5
DAL602	Optimization for Machine Learning	4.5
DAL603	Deep Learning	4.5
DAL604	Communicating Data and Analysis	4.5
Total Requirements		**18**

Internship/Project (Co-op)

APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
Total Requirements		**9.0**

Professional Core Courses

PCC101	Skills for Lifelong Learning	0.5
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
PCT100	Advanced Excel/Word Training	0.5

Total Requirements	**2.0**
Summary of Total Requirements	
Total Foundation Courses	31.5
Total Core Requirements	58.6
Total Common Courses Requirements	18
Total Co-Op Requirements	9.0
Total Professional Course Requirement	2.0
Master of Computer Application Total Credits Required for Graduation	**119**

School of Engineering

KKMU prepares students to address the most compelling challenges of the world, backed by sound knowledge, integrity, research, and innovation. With state-of-the-art infrastructure, faculty of the highest professional standards, a carefully crafted curriculum, active industry-academia collaborations, and global exposure, we provide students with specialised knowledge and practical skills, which enables them to make ground-breaking discoveries.

M. Tech

10 Core Requirements x 4.5 credit hours	= 45 credit hours
4 Common Courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op Capstone courses x 4.5 credit hours	= 9.0 credit hours
2 Professional Certification Courses (PCC) x 0.5 credit hours	= 1.0 credit hours
16 courses x 4.5 credit hours + 2 PCC x 0.5 credit hours	= 73 Credit Hours

This program typically takes 2 years to complete for students enrolled full time.

Core Requirements (10 Courses required)

Course Code	Course Name	Credits
PRG501	Design and Analysis of Algorithms	4.5
PRG502	Object Oriented Analysis and Design	4.5
CST501	Advanced Network Security	4.5
AIM501	Artificial Intelligence and Machine Learning Applications	4.5
CLD501	Cloud Computing	4.5
MGT203	Design Thinking	4.5
CST502	Wireless Computing	4.5
CST503	Advanced DBMS	4.5
CST504	Distributed Systems	4.5
PRG503	Advanced Web Design	4.5
Total Requirements		**45**

Common Courses (Four Courses Required)

CLD601	Advanced Security in Cloud	4.5
CLD602	Data Center Virtualization	4.5
CLD603	Cloud Strategy Planning and Management	4.5

CLD604	Mobile Cloud	4.5
CYB601	Penetration Testing	4.5
CYB602	Computational Statistics and Data Mining	4.5
CYB603	Governance, Risk and Compliance	4.5
CYB604	Cryptography	4.5
AIM601	Mathematics for Artificial Intelligence	4.5
AIM602	Soft Computing Techniques	4.5
AIM603	Big-data Analytics	4.5
AIM604	Machine Learning Techniques	4.5
Total Requirements		**18**
Internship/Project (Co-op)/		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
Total Requirements		**1.0**
Summary of Total Requirements		
Total Core Requirements		45
Total Common Courses Requirements		18
Total Co-Op Requirements		9.0
Total Professional Course Requirement		1.0
Master of Technology Total Credits Required for Graduation		**73**

M. Tech with Specialization (UI/UX; IOT; Image processing; DevOps; Cyber Security and Forensic; Cloud Computing and Virtualization; Artificial Intelligence and Machine Learning and Full Stack Development)

10 Core Requirements x 4.5 credit hours	= 45 credit hours
4 Specialization Courses x 4.5 credit hours	= 18 credit hours
Internship/Co-op Capstone courses x 4.5 credit hours	= 9.0 credit hours
2 Professional Certification Courses (PCC) x 0.5 credit hours	= 1.0 credit hours
16 courses x 4.5 credit hours + 2 PCC x 0.5 credit hours	= 73 Credit Hours

This program typically takes 2 years to complete for students enrolled full time.

Core Requirements (10 Courses required)

Course Code	Course Name	Credits
PRG501	Design and Analysis of Algorithms	4.5
PRG502	Object Oriented Analysis and Design	4.5
CST501	Advanced Network Security	4.5
AIM501	Artificial Intelligence and Machine Learning Applications	4.5
CLD501	Cloud Computing	4.5
MGT203	Design Thinking	4.5
CST502	Wireless Computing	4.5
CST503	Advanced DBMS	4.5
CST504	Distributed Systems	4.5
PRG503	Advanced Web Design	4.5
Total Requirements		**45**

Specialization Courses (Four Courses Required)

CLD601	Advanced Security in Cloud	4.5
CLD602	Data Centre Virtualization	4.5
CLD603	Cloud Strategy Planning and Management	4.5
CLD604	Mobile Cloud	4.5
Total Requirements		**18**

UI/UX Specialization (Four Courses Required)

UIX601	User Interface Design	4.5

UIX602	Graphics and Animation	4.5
UIX603	Operating Systems and Computer Architecture	4.5
UIX604	Unix Programming	4.5
Total Requirements		**18**
Specialization Requirements		
IOT (Four Courses Required)		
IOT601	Information Retrieval	4.5
IOT602	Wireless Access Technologies	4.5
IOT603	Data Science	4.5
IOT604	Smart Sensors and IOT	4.5
Total Requirements		**18**
Image Processing (Four Courses Required)		
IMP601	Advanced Digital Signal Processing	4.5
IMP602	Digital Image Processing	4.5
IMP603	Computer Graphics & Volume Visualisation	4.5
IMP604	Pattern Recognition	4.5
Total Requirements		**18**
DevOps (Four Courses Required)		
DEV601	DevOps and Big Data Integration, Agile Practices	4.5
DEV602	DevOps on Cloud, Exploration, Analytics and Visualization	4.5
DEV603	System Virtualization and Test Automation	4.5
DEV604	Configuration Management	4.5
Total Requirements		**18**
Cyber Security and Forensic (Four Courses Required)		
CYB601	Penetration Testing	4.5
CYB602	Computational Statistics and Data Mining	4.5
CYB603	Governance, Risk and Compliance	4.5
CYB604	Cryptography	4.5
Total Requirements		**18**
Cloud Computing and Virtualization (Four Course Required)		
CLD601	Advanced Security in Cloud	4.5

CLD602	Data Center Virtualization	4.5
CLD603	Cloud Strategy Planning and Management	4.5
CLD604	Mobile Cloud	4.5
Total Requirements		**18**
Artificial Intelligence and Machine Learning		
AIM601	Mathematics for Artificial Intelligence	4.5
AIM602	Soft Computing Techniques	4.5
AIM603	Big-data Analytics	4.5
AIM604	Machine Learning Techniques	4.5
Total Requirements		**18**
Full Stack Development (Four Courses Required)		
PRG601	The Advanced Web Developer Bootcamp	4.5
PRG602	Full Stack Java Developer	4.5
PRG603	Web Application Development with JavaScript and MongoDB	4.5
PRG604	Full Stack Cloud Developer	4.5
Total Requirements		**18**
Internship/Project (Co-op)/		
APT700	Capstone	4.5
INT600	Internship (Co-op) I	4.5
Total Requirements		**9.0**
Professional Core Courses		
PCC103	Harvard Certification - Ethics at Work	0.5
PCC104	Positive Intelligence	0.5
Total Requirements		**1.0**
Summary of Total Requirements		
Total Core Requirements		45
Total Specialization Courses Requirements		18
Total Co-Op Requirements		9.0
Total Professional Course Requirement		1.0
M. Tech with Specialization Total Credits Required for Graduation		**73**

Graduate Course Descriptions

Graduate courses have numbers 500 and above. Consult with your advisor prior to enrolment to make certain that your course selection will meet your degree or diploma requirements and that you satisfy all prerequisites. Each course description includes all pre-requisite requirements. Any exceptions to these requirements must be approved by the Dean

ACC501 Accounting for Managerial Decision Making 4.5

The objective of the course is to familiarize the students with the basic management accounting concepts and their applications in managerial decision making. **Prerequisite: None**

ACC502 Advanced Managerial Accounting 4.5

The Advanced Managerial Accounting course will focus on problem solving for managerial accounting issues. Students will prepare for the role accountants have in planning and control of the organization. Students will also develop knowledge about and develop proficiencies in efficient techniques in analysis for decision making using cost information and economic insight. Students will also develop effective ways to communicate results and uphold ethical principles. **Prerequisite: None**

ACC601 Accounting Theory and Financial Reporting 4.5

This course is a survey of current financial accounting theory. The purpose of the course is to develop accounting thought that can be applied to the practical understanding of the financial reporting process, the accounting profession, and the controversial role of accounting in today's dynamic business environment. Major course topics include the nature of accounting theory; the historical development of accounting, the FASB's Conceptual Framework project; and the influence of standard setting agencies on the economic consequences of financial reporting**. Prerequisite: None**

ACC602 Cost Estimation and Control 4.5

Summarize the basic principal and standard methods for working out quantities in estimating; Demonstrate the detailed estimate of buildings and workout rate analysis of the various items of work; Understand the material requirements as per specified norms and standards; assess the valuation of buildings and provide practical knowledge of standard specifications of items of buildings construction. **Prerequisite: None**

ACC603 Strategic Cost Analysis and Performance Evaluation 4.5

Throughout the course, a strategic cost analysis and management framework will be applied across functions and organizations to highlight the cost analysis and performance evaluation methods available to forecast financial performance and improve strategic position. **Prerequisite: None**

ACC604 Advanced Corporate Accounting and Accounting Standards 4.5

To provide theoretical knowledge of International Financial Reporting Standards and enable the students to gain ability to solve problems relating to Holding Company Accounts, Liquidation of Companies and various other Accounts. **Prerequisite: None**

AIM401 Deep Learning 4.5

This course introduces major deep learning algorithms, the problem settings, and their applications to solve real world problems; Identify the deep learning algorithms which are more appropriate for various types of learning tasks in various domains and implement deep learning algorithms and solve real-world problems. **Prerequisite: None**

AIM501 Artificial Intelligence and Machine Learning Applications 4.5

AI is an introductory course in Artificial Intelligence. The goal is to acquire knowledge on intelligent systems and agents, formalization of knowledge, reasoning with and without uncertainty, machine learning and applications at a basic level. **Prerequisite: None**

AMI601 Mathematics for Artificial Intelligence 4.5

The course has been designed in collaboration with industry experts to help you breakdown the difficult mathematical concepts known to man into easier to understand concepts. The course covers three main mathematical theories: Linear Algebra, Multivariate Calculus and Probability Theory. **Prerequisite: None**

AIM602 Soft Computing Techniques 4.5

The main objective of the course is to expose the students to soft computing, various types of soft computing techniques, and applications of soft computing. **Prerequisite: None**

AIM603 Big-data Analytics 4.5

To study the basic technologies that forms the foundations of Big Data; to study the programming aspects of cloud computing with a view to rapid prototyping of complex applications and understand the specialized aspects of big data including big data application, and big data analytics; to study different types Case studies on the current research and applications of the Hadoop and big data in industry**. Prerequisite: None**

AIM604 Machine Learning Techniques 4.5

The objective of the course is to understand the basic theory underlying machine learning; to be able to formulate machine learning problems corresponding to different applications and to understand a range of machine learning algorithms along with their strengths and weaknesses. **Prerequisite: None**

APT700 Applied Thesis 4.5

Students independently research a topic to obtain a deep understanding of the subject matter and often work towards developing a solution, product, innovative idea or a prototype on a real-world problem. Students will dig into detail about the purpose of this significant work as well as methods to overcome some hurdles. **Prerequisite: None**

BAL601 Introduction to Business Analytics 4.5

This course introduces students to the science of business analytics while casting a keen eye toward the artful use of numbers found in the digital space. The goal is to provide businesses and managers with the foundation needed to apply data analytics to real-world challenges they confront daily in their professional lives. **Prerequisite: None**

BAL602 Big Data Analytics with Lab 4.5

This course provides an overview of an exciting growing field of big data analytics; introduce the tools required to manage and analyze big data like Hadoop, No Sql MapReduce and teach the fundamental

techniques and principles in achieving big data analytics with scalability and streaming capability. **Prerequisite: None**

BAL603 Social & Web Analytics with Lab 4.5

This course explores the impending revolution in digital analytics, one that has the potential to change both the Web analytics and business intelligence fields. Students will study Web Analytics (Adobe Analytics and Google Analytics). **Prerequisite: None**

BAL604 Business Analytics for Industry 4.5

Business analytics is a powerful tool in today's marketplace. Across industries, organizations are generating vast amounts of data which, in turn, has heightened the need for professionals who know how to interpret and analyze that information. **Prerequisite: None**

CLD601 Advanced Security in Cloud 4.5

The course will describe the Cloud security architecture and explore the guiding security design principles, design patterns, industry standards, applied technologies and addressing regulatory compliance requirements critical to design, implement, deliver and manage secure cloud-based services**. Prerequisite: None**

CLD602 Data Center Virtualization 4.5

This course covers data center virtualization concepts. Topics include data storage, virtual network configuration, virtual machine and virtual application deployment. Upon completion, students should be able to perform tasks related to virtual machine and hypervisor installation and configuration. **Prerequisite: None**

CLD603 Cloud Strategy Planning and Management 4.5

This course deals with the concepts and technological advances fueling the rapid adoption of cloud computing today. This course provides the students with the skills and knowledge required to plan and manage a Cloud Computing strategy within an organization. This course will enable students to evaluate the strategic value of Cloud Computing using IT Governance and Compliance. **Prerequisite: None**

CLD606 Mobile Cloud 4.5

The mobile computing technology used in modern smart phones; The cloud computing technologies used in existing data centers; the synergy of mobile and cloud computing and its applications; Programming on smart phone utilizing data center services. Students will gain knowledge of: the fundamental principles of mobile cloud computing, the major technologies that support mobile cloud computing, the current challenges and primary areas of research within the field of mobile cloud computing, and a basic understanding of the role of mobile cloud computing in the context of the everyday living. **Prerequisite: None**

CST501 Advanced Network Security 4.5

The objective of this course is to expose students to advanced topics in network security. Topics covered will include network security issues like authentication, anonymity, traceback, denial of service, encryption, forensics etc. in both wired and wireless networks. At the conclusion of the course, students will be expected to get a clear and in-depth understanding of state of the art in network security attacks and defenses. **Prerequisite: None**

CST502 Wireless Computing 4.5

This course will examine the area of wireless networking, looking at the unique network protocol challenges and opportunities presented by wireless communications and host or router mobility. The course will give a brief overview of fundamental concepts in mobile wireless systems and mobile computing, it will then cover system and standards issues including wireless LANs, mobile IP, ad-hoc networks, sensor networks, as well as issues associated with small handheld portable devices and new applications that can exploit mobility and location information. This is followed by several topical studies around recent research publications in mobile computing and wireless networking field. This course will make the system architecture and applications accessible to the electrical engineer and computer scientist. **Prerequisite: None**

CST503 Advanced DBMS 4.5

Advanced database systems try to meet the requirements of present-day database applications by offering advanced functionality in terms of data modelling, multimedia data type support, data integration capabilities, query languages, system features, and interfaces to other worlds. **Prerequisite: None**

CST504 Distributed Systems 4.5

A distributed system is a computing environment in which various components are spread across multiple computers (or other computing devices) on a network. This course provides an in-depth understanding of fundamental principles and models underlying the theory, algorithms, and systems aspects of distributed computing. **Prerequisite: None**

CST505 Advanced Data Communication and Networks 4.5

This course will teach basics of Data Communication and Computer Network (DCN) and will also take through various advance concepts related to Data Communication and Computer Network. Data communications refers to the transmission of this digital data between two or more computers and a computer network or data network is a telecommunications network that allows computers to exchange data. **Prerequisite: None**

CST506 Automata Theory 4.5

Automata, Languages and Computation have been an important part of the curriculum in computer science for several decades. The automata theory is the study of abstract machines and their application in solving computational problems. This course covers the theory of automata and languages. It includes the study of finite automata and the languages they can define (the so-called "regular languages."). Topics include deterministic and nondeterministic automata, regular expressions, and the equivalence of these language-defining mechanisms, grammar, Turing machine etc. **Prerequisite: None**

CST507 Advanced Operating Systems 4.5

This course teaches the basic operating system abstractions, mechanisms, and their implementations. The core of the course will discuss the history of modern computers and further it analyses in detail each of the major components of an operating system (from processes to threads, synchronization, deadlock), and explore more advanced topics in the field, including memory management and file input/output. **Prerequisite: None**

CST508 Advanced Database Management Systems 4.5

Databases form the backbone of all major applications today – tightly or loosely coupled, intranet or internet based, financial, social, administrative, and so on. Structured Database Management Systems (DBMS) based on relational and other models have long formed the basis for such databases. This course examines data structures, file organizations, concepts and principles of DBMS's, data analysis, database design, data modelling, database management, data & query optimization, and database implementation. **Prerequisite: None**

CYB601 Penetration Testing 4.5

This course is designed to strengthen penetration testers and further add to their skillset. The course is also designed to train system administrators, defenders, and others in security to understand the mindset and methodology of a modern attacker. Every organization needs skilled information security personnel who can find vulnerabilities and mitigate their effects, and this entire course is specially designed to get you ready for that role. Both the offensive teams and defenders have the same goal: keep the real bad guys out. **Prerequisite: None**

CYB602 Computational Statistics and Data Mining 4.5

This subject will introduce a number of recently developed methods and applications in computational statistics and data science that are scalable to large datasets and high-performance computing. The data mining methods to be introduced include general model diagnostic and assessment techniques, kernel and local polynomial nonparametric regression, basis expansion and nonparametric spline regression, generalised additive models, classification and regression trees, forward stagewise and gradient boosting models. **Prerequisite: None**

CYB603 Governance, Risk and Compliance 4.5

In today's complex global business environment, having a transparent view of information and a coordinated approach to the governance, management and assurance of performance, risk and compliance is critical to success. Organisations that understand and apply the principles of integrated governance, risk management and compliance (GRC), in both processes and technology, have a real competitive advantage. This course enables participants to effectively design and enhances GRC activities within an organisation based on established, internationally recognised GRC standards, and effectively audit the GRC capability. **Prerequisite: None**

CYB604 Cryptography 4.5

To make the student learn different encryption techniques along with hash functions, MAC, digital signatures and their use in various protocols for network security and system security. **Prerequisite: None**

DAL601 Statistics for Data Sciences 4.5

Statistics for Data Science course will prepare you to solve complex challenges with data and drive important decision-making processes. You will learn to code at an introductory level and take the first steps to becoming a data scientist. **Prerequisite: None**

DAL602 Optimization for Machine Learning 4.5

This course provides an accessible entry point to Modeling and Optimization for Machine Learning, key skills needed to use state-of-the-art software and algorithms from machine learning. It covers underlying theoretical motivations behind widely-used optimization algorithms (the "science"), while

diving deep into aspects of mathematical modeling (the “art”) to provide students with an intuitive, foundational introduction to this modern and fast-moving research area. **Prerequisite: None**

DAL604 Communicating Data and Analysis 4.5

In this course, Communicating Data and Analysis Results, you’ll learn how to take data and analysis results and communicate them effectively. First, you’ll begin with preparation – choosing the story, ensuring that you understand the data and deciding what conclusions you wish to share. Next, you’ll explore the presentation itself – how to structure it to be effective, and keep viewers engaged. Finally, you’ll discover how follow-up can ensure that the data and results sink in so they can drive action and produce solutions. **Prerequisite: None**

DEV601 DevOps and Big Data Integration, Agile Practices 4.5

DEV602 DevOps on Cloud , Exploration, Analytics and Visualization 4.5

DEV603 System Virtualization and Test Automation 4.5

DEV604 Configuration Management 4.5

This course provides a basic introduction to the theory, principles, and techniques of Configuration Management as it applies to the entire software lifecycle. It addresses the application of CM in a wide variety of approaches to software development and maintenance, from traditional to agile. The course illustrates the CM strategies, techniques, and required tool capabilities that support each of the activities in the software development life cycle. The student will also gain a value-based understanding of which CM techniques are most useful for the development approach and tool capabilities that currently exist in their company. **Prerequisite: None**

DGM601 Digital Journey and Brand Management 4.5

The Digital Strategy for Brand Management course provides a comprehensive overview of brand management and marketing principles & concepts. Learn how to help your business establish a digital presence through the effective use of the content, images, and user engagement that appeals to your target market. **Prerequisite: None**

DGM602 Social Media Optimization 4.5

This course provides you with the skills to optimize your social media marketing efforts. Learn to evaluate and interpret the results of your advertising campaigns. Learn how to assess advertising effectiveness through lift studies and optimize your campaigns with split testing. Understand how advertising effectiveness is measured across platforms and devices, learn how to evaluate the ROI of your marketing, and master how to communicate your social media marketing results to others in the company. **Prerequisite: None**

DGM603 Web and Text Analysis 4.5

In this course, you will learn the fundamental concepts of text analytics and perform text analytics on different applications. Learn Text analytics concepts and applications ; Fundamental of Information retrieval and natural language processing; Text analytics framework; Theoretical techniques and applications in text analytics (e.g. social media) Python packages and commands to perform text analytics. **Prerequisite: None**

DGM604 E-Commerce Analytics 4.5

This course covers eCommerce fundamentals including how to generate traffic for an e-commerce website, identify and segment the best customers for increasing the business valuation, and leverage operations data to make smarter financial decisions for the profitability of the business based on inventory. **Prerequisite: None**

ENT501 Entrepreneurship and Venture Management 4.5

This course presents the knowledge and skills needed to create and manage a new venture. It also examines the various dynamics associated with the various forms of entrepreneurial activity. In this course students are required to interview an entrepreneur, develop recommendations for a company and address challenges, and analyse a sector to uncover entrepreneurial opportunities and develop your own business concepts. **Prerequisite: None**

ENT601 International Economics 4.5

This course examines key dimensions of the global economy and global economics, including international business opportunities and risks, trade theory and policy, the balance of payments, foreign exchange markets, exchange rate systems and risks, and international payment systems. **Prerequisite: None**

ENT602 Growth Strategies for Emerging Companies 4.5

This course offers practical management tools to help grow and manage high potential new ventures. Topics include internal rapid growth strategies (including product development (high and low technology), vertical expansion, horizontal expansion, etc.), external rapid growth strategies (rollups, exporting, franchising, and acquisition, etc.), and unique growth techniques for technology product based firms. **Prerequisite: None.**

ENT603 Growth Strategies for Emerging Markets 4.5

This course examines how firms conduct an analysis and selects new international markets for entry, how firms develop strategies for success- fully entering these markets, and how firms manage these markets for growth and subsequent expansion. **Prerequisite: None**

ENT604 Business Plan for the New Venture 4.5

In this course each student must produce a business plan that will be accepted for the annual program business plan competition. It is expected that several business plans will be of sufficient quality that they will attract financing. Topics include a deep review of business plan construction and its derivative short forms (1 page summary, 3 pages summary, and executive summary). **Prerequisite: None.**

FIN501 Corporate Finance 4.5

This course is an in-depth analysis of financial considerations relating to maximizing the value of a corporation. It examines the setting of financial and corporate goals in terms of maximizing shareholders' equity, optimal financing policy and relationships among dividend policy, debt levels, capital costs, return on investments, and growth. **Prerequisite: None**

FIN601 Security Analysis and Portfolio Management 4.5

This course provides a broad overview of investment management, focusing on the application of finance theory to the issue faced by portfolio managers and investors in general and To provide conceptual foundation for the purpose of undertaking Investment analysis for securities as well as portfolios. **Prerequisite: None**

FIN602 Financial Statement Analysis 4.5

This course examines financial accounting rules and helps students develop skills in interpreting and analysing external financial reports. **Prerequisite: None**

FIN603 Financial Modelling and Decision Making 4.5

Presents the theory and practice of financial management, emphasizing computer-based modelling and forecasting. Uses spreadsheets and other software products to analyze the impacts of financial decisions related to financial statement analysis, cash budgeting, and cost of capital determination, capital budgeting, and capital structure choices. The course covers a variety of techniques, such as sensitivity and scenario analysis, optimization methods, Monte Carlo simulation, and regression analysis. **Prerequisite: None**

FIN604 Financial Risk Management 4.5

The course is aimed at the understanding of main functions of financial risk management and its role in the system of a corporate management. It also provides students with tools and methods of financial risks assessment and mitigation. **Prerequisite: None**

FIN605 Financial Management II 4.5

This course provides an overview of financial management, with an emphasis on analysis of financial decisions pertinent to management of a business firm. The course identifies the responsibilities of financial man- agers, financial problems facing firms, and the various approaches to financial decision making. **Prerequisite: None**

FIN606 Investment Analysis 4.5

The objective of this course is to introduce the intuition and concepts of Investment analysis. Two broad decisions have been taken by any investors: allocation of the total investment in available asset classes and how to select the assets within asset classes for investment. The course will help the participants in developing skills required to conduct assessment of current issues covered by media and specialized journals. **Prerequisite: None**

FIN607 Debt Market 4.5

The students will be able to understand the difference between equity market & debt market and its various instruments. The students will know the importance of different players and their functioning The student will be able to identify different types of bonds, the process of rating agencies , benefits of rating The student will be able to calculate bond value i.e Present value & Future Value. **Prerequisite: None**

FIN608 Financial Derivatives 4.5

This course aims at providing an in-depth understanding of financial derivatives in terms of concepts, structure, instruments and trading strategies for profit and risk management. **Prerequisite: None**

FIN609 International Finance 4.5

The objective of this course is to provide students with an in-depth knowledge of these issues. The main topics covered in this course are: forex markets, international Parity conditions, forex risks, currency derivatives and hedging issues, issues with currency investment strategies, issues with cross border financing decisions and cross border investment decisions. **Prerequisite: None**

FIN610 International Financial Systems 4.5

This course is a comprehensive understanding of the system and regulation of international financial relations. The discipline studies modern approaches to the analysis of interaction between financial markets, the real economy and international financial institutions. The course covers relevant topics of international regulation of financial markets. The course is based on traditional theories of financial markets as well as on modern trends of the global financial system. **Prerequisite: None**

FIN611 International Financial Management 4.5

This course is concerned with the financial management of the firms that operate in the increasingly globalized business environment. Emphasizing broad concepts and real-world practices rather than extensive quantitative material, the course offers a concise introduction to international finance and provides a clear, conceptual framework for analyzing key financial decisions in multinational firms. The approach of the course is to treat international financial management as a natural and logical extension of the principles learned in the introductory financial management course. **Prerequisite: None**

HRM501 Human Resource Management 4.5

This introductory course concentrates on human resource management issues confronting organizations. These issues include organizational practices and legal aspects of recruitment, selection, training, orientation, and performance appraisals. Labour relations are also discussed. **Prerequisite: None**

HRM601 Change Management 4.5

This course examines and applies the process of change management. During this course students begin with an overview of change management, then examine change management models and theories, evaluate strategic and tactical factors in change management, implement a change management initiative, and consider steps for evaluating, refining, and sustaining change. The study group project on change requires the planning and implementation of a change process. **Prerequisite: None.**

HRM602 Industrial Relations and Labour Laws 4.5

This course focuses on the Management of employees, both individually and collectively. It demonstrates how individual relations & labour law remain a central feature of organizational life. This course examines the conceptual and practical aspects of employee relations at the macro and micro levels. **Prerequisite: None**

HRM603 Performance Management 4.5

This course provides a powerful combination of training, communicating, and motivating skills that will enable the students to successfully challenge your staff to reach higher levels of performance. **Prerequisite: None**

HRM604 Compensation and Benefit Management 4.5

This course focuses on how organizations use compensation and benefits to achieve their operational & strategic goals. It explores compensation design, analysis, and evaluation. The design of pay systems, paying for performance, and the administration of pay systems are appraised and assessed**.** **Prerequisite: None HSM601 Healthcare Environment & Management 4.5**

This course is intended to introduce students to foundational and technical concepts in the field of Environmental Public Health (EPH). Primarily, students will learn how a variety of environmental factors impact health outcomes, the control measures currently used to prevent or minimize the health effects from these negative impacts, and where to access additional information to make a difference at the individual, community or higher level. The course is designed to acquaint the student with the scientific and technical foundations of the field and examines both practice and research contributions to understanding and controlling environmental hazards. **Prerequisite: None**

HSM602 Health care Laws, Ethics and Medical Terminology 4.5

This course is dedicated to the analysis and application of Healthcare Law and Ethics. Emphasis is placed on analysis of the legal and healthcare environment and its relationship to medical ethics. Students will examine case studies and will learn to identify and respond to legal and ethical issues. **Prerequisite: None**

HSM603 Hospital Operations Management 4.5

The objectives of this course are to provide students with a better understanding of the concepts, strategies and the issues involved in the day to day functioning of the hospital as managers and administrators. **Prerequisite: None**

HSM604 Patient Care Management 4.5

This course demonstrates the competency in providing health care to individual, sick or well, using nursing process; assess the nursing need of clients from birth of death; plan and carry out appropriate action to meet nursing needs and provide effective nursing care for maintain best possible level of health in all aspects. **Prerequisite: None**

HTM601 Front Office Operations and Management 4.5

The Managing Front Office Operations course is designed to provide students with a basic understanding of front office procedures in the hotel industry. Students will understand, organize, perform and evaluate front office functions that are critical to the success of a hotel. Students will be trained in the importance of guest service, along with any technical aspects of front office management. Meet our expert trainers to learn hotel management courses in a professional way. Become a professional receptionist at Bright Future. **Prerequisite: None**

HTM602 Food, Service and Catering Operations 4.5

Prepare students to meet the challenges of functional catering, specialized service. Acquires information about the suppliers and manufacturers, familiarize planning and operating in F & B outlets. **Prerequisite: None**

HTM603 Housekeeping Operations 4.5

This course presents a systematic approach to managing housekeeping operations and provides a thorough overview, from the big picture of maintaining a quality staff, planning, and organizing, to the technical details of cleaning each area of a hospitality facility. **Prerequisite: None**

HTM604 Event Management 4.5

To familiarize on event management and provide information on arranging larger functions; To impart the leadership skills required for conducting event. **Prerequisite: None**

IMP601 Advanced Digital Signal Processing 4.5

Digital Signal Processing (DSP) is at the heart of many applications in a wide array of fields: speech and audio processing, system monitoring and fault detection, biomedical signal analysis, mobile and internet communications, radar and sonar, vibration measurement and analysis, seismograph analysis, image/video coding and decoding etc. The objective of this course is to strengthen the students' knowledge of DSP fundamentals, and to familiarize them with the practical aspects of DSP algorithm development and implementation. **Prerequisite: None**

IMP602 Digital Image Processing 4.5

To introduce the concepts of image processing and basic analytical methods to be used in image processing. To familiarize students with image enhancement and restoration techniques, To explain different image compression techniques. To introduce segmentation and morphological processing techniques. **Prerequisite: None**

IMP603 Computer Graphics & Volume Visualisation 4.5

This course provides a comprehensive knowledge on scientific/information visualization concepts, theory, algorithms, techniques, and applications for data acquisition/simulation procedures, data modeling techniques, commonly used conventional visualization techniques, visualization and rendering processes, visualization of 2D, volumetric, higher-dimensional, and time-series datasets, human-computer interactions, and other key elements of visual computing. **Prerequisite: None**

INT600 Internship (Co-op) I 4.5

Course offers students opportunity to earn academic credit for off-campus or on-campus internship experience with formal reflection on professional field. This can also refer to a certain disciplinary work with a faculty member, typically during the Fall or Spring. **Prerequisite: None**

INT601 Internship (Co-op) II 4.5

Course offers students opportunity to earn academic credit for off-campus or on-campus internship experience with formal reflection on professional field. This can also refer to a certain disciplinary work with a faculty member, typically during the Fall or Spring. **Prerequisite: None**

IOT601 Information Retrieval 4.5

The main objective of this course is to present the scientific support in the field of information search and retrieval. This course explores the fundamental relationship between information retrieval, hypermedia architectures, and semantic models, thus deploying and testing several important retrieval models such as vector space, Boolean and query expansion. It discusses implementation and evaluation issues of new algorithms like clustering, pattern searching, and stemming with advanced data/file structures, indirectly facilitating a platform to implement comprehensive catalogue of information search tools while designing an e-commerce web site. **Prerequisite: None**

IOT602 Wireless Access Technologies 4.5

This course focuses on Wireless Access Technologies to Internet Network including technical, business and regulatory aspects. It includes wireless and mobile evolutions including mobility approaches by IETF and 3GPP, 4G access technologies by 3GPP (LTE/LTE-Advanced), as well as Evolved Packet Core (EPC). **Prerequisite: None**

IOT603 Data Science 4.5

The goal of data science is to construct the means for extracting business-focused insights from data. This requires an understanding of how value and information flows in a business, and the ability to use that understanding to identify business opportunities. **Prerequisite: None**

IOT604 Smart Sensors and IOT 4.5

In this course, the important sensors, associated interface electronics, signal conditioning, technology of smart sensor and IOT for the measurement and monitoring of vital environmental parameters will be discussed. Objectives of the course include the importance of environmental parameters measurement and monitoring (b) Exposing participants to the comprehensive fundamentals of Smart Sensors and Internet of Things (IOT). **Prerequisite: None**

MAS601 Data Journalism 4.5

This course focuses on core concepts and principles in data journalism, exploring how data enhances reporting and giving an overview of tools for producing data visualizations. Topics include analyzing and structuring data, combining data from multiple data sets, and developing engaging visualizations**. Prerequisite: None**

MAS602 Investigative Reporting 4.5

The goal of this course is to inspire you and teach you the practical skills and ethical principles that will allow you to become a responsible investigative reporter – digital, broadcast or print. **Prerequisite: None**

MAS603 Public Relations and Events 4.5

This course focuses on the professional significance of learning Public Relations & Events, its tools, objectives and functions. It generates the art of managing clients, their agents, and a vast gamut of professionals one meets in their career to create organizations' branding.

MAS604 Media, CSR & Sustainable Development 4.5

This course is be able to Identify the dimensions of and analyse the theories developed to explain sustainable development Explore the dimensions of and comprehend the theories developed to introduce social responsibility parameters in business entities Analyse roles and interrelationships between major international, national, and local codes of business principles underlining social responsibility Examine the legal and ethical issues undermining the business roles in social formation/development

MGT501 International Business 4.5

This course examines current organizations and practices of domestic and foreign businesses in the international market; problems of trade and foreign government regulation barriers, investment opportunities and economic arrangements and developments; and the role of the manager in the rapidly changing economic environment. **Prerequisite: MGT201.**

MGT507 Business Transformation 4.5

With today's fast-paced and hectic way of doing business, change in the workplace has become an everyday reality. Change happens rapidly and sometimes with very little notice. Major changes such as mergers, takeovers, and layoffs can leave employees feeling confused, fearful, or disheartened. This course is designed to help future managers work through organizational change by studying strategies for providing positive leadership. **Prerequisite: None**

MKT502 Strategic Business Marketing 4.5

This course develops the marketing principles by which products and services are designed to meet customer needs, priced, promoted, and distributed to the end user. The focus is on the application of these marketing principles to a wide range of customers, both internal and external. Topics include new product/service introduction and segmentation and positioning strategy. **Prerequisite: None.**

MKT601 Electronic Commerce: Business Models & Strategies 4.5

This course presents the state-of-the-art in electronic commerce. Its focus is on the current and future impact of e-commerce on the student's organization, industry, and professional activities. Students examine recent successes and failures in e-commerce through case studies and other readings and will develop an e-commerce business plan for their organization. **Prerequisite: None**

MKT602 Influencer Marketing 4.5

Students will learn how to create one for a wide variety of B2B, B2C, and non-profit organizations using the two-step flow model of communication. Student will be able to confidently navigate this new digital advertising format, understand the various influencer archetypes and campaign use cases, and comfortably run a campaign for the brand you represent. **Prerequisite: MKT601**

MKT603 Internet Marketing Strategies 4.5

This course introduces the student to concepts, tools, and techniques as they apply in business-to-consumer (B2C) and business- to-business (B2B) el

ectronic marketing. Specific topics include: branding and recognition; consumer and organizational behaviour in an e-market place; channels and relationship marketing; tools and techniques in the B2B market; and assessment of e-market opportunities. **Prerequisite: MKT501**

MKT604 International Marketing Management 4.5

The course examines international market segmentation, product attributes, cultural differences, and economic differences, differences in product and technical standards, global advertising, and international pricing in transnational business operations. It stresses application of marketing concepts, principles and procedures for planning, development, implementation and control of marketing programs. **Prerequisites: MKT156**

MOC601 Application Development using Python 4.5

Learn the syntax and semantics of Python programming language; Illustrate the process of structuring the data using lists, tuples and dictionaries; demonstrate the use of built-in functions to navigate the file system; implement the Object Oriented Programming concepts in Python ; appraise the need for working with various documents like Excel, PDF, Word and Others. **Prerequisites: None**

MOC602 Advanced Web Technologies 4.5

The aim of this course is to teach the students the concepts, technologies and techniques for creating large-scale distributed software system using service-oriented computing and cloud applications. **Prerequisites: None**

MOC603 Internet of Things 4.5

This course will describe the market around the Internet of Things (IoT), the technology used to build these kinds of devices, how they communicate, how they store data, and the kinds of distributed systems

needed to support them. Divided into four modules, we will learn by doing. We will start with simple examples and integrate the techniques we learn into a class project in which we design and build an actual IoT system. The client will run in an emulated ARM environment, communicating using common IoT protocols with a cloud enabled backend system. **Prerequisites: None**

MOC604 Computer Vision 4.5

The objectives are to develop your understanding of the basic principles and techniques of image processing and image understanding, and to develop your skills in the design and implementation of computer vision software. **Prerequisites: None**

MTH501 Advanced Discrete Mathematics 4.5

Discrete Mathematics (DM), or Discrete Math is the backbone of Mathematics and Computer Science. It is the study of topics that are discrete rather than continuous, for that, the course is a must for any Math or CS student. The topics that are covered in this course are the most essential ones, those that will touch every Math and Science student at some point in their education. The goal of this course is to build the mathematical foundation for computer science courses such as data structures, algorithms, relational and database theory. **Prerequisites: None**

PRG501 Design and Analysis of Algorithms 4.5

Important for designing algorithm such as the greedy method, divide and conquer, dynamic programming, backtracking and branch and bound to solve different types of problems in the branch of computer science and information technology. **Prerequisite: None**

PRG502 Object Oriented Analysis and Design 4.5

In Object-Oriented Concepts, the core concepts will be introducing behind modern, object-oriented, programming. It will include discussion of objects, classes, messaging, inheritance, polymorphism, and more. As with Fundamentals of Programming, it will illustrate the concepts using the Java language, but they will be portable to other object-oriented programming languages. **Prerequisite: None**

PRG503 Advanced Web Design PRG503 4.5

This course will help you take your web design skills to the next level. It refers to designing, developing, and maintaining websites, including different aspects such as Web design, publishing and development. This course is to provide delegates with a comprehensive understanding of the technologies required to become a Web Designer. **Prerequisite: None**

PRG504 Advanced Data Structures and Algorithm using Java 4.5

This course aims to cover the essential topics of data structures and algorithms and how the same can be implemented using Java programming language. The participants of the proposed course will be able to improve their skills, to cope with the current demand of IT industries and solve many problems in their own filed of studies**. Prerequisite: None**

PRG505 Advanced Software Engineering 4.5

This course will teach how to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment. It will enable to build high-quality and secure software using SDLC methodologies such as agile, lean, and traditional/waterfall and analyse a software development team's SDLC methodology and make recommendations for improvements. **Prerequisite: None**

PRG506 Computer Graphics 4.5

Computer graphics is one of the fundamental aspects of any computing system. Computer Graphics are created using 2D, 3D designs and Animation designs. Its primary role is to render the digital content (0's and 1's) in a human-comprehensible form on the computer screen. In this course, we will introduce the pipeline and its stages. The topics covered include various object representation techniques followed by the pipeline stages of modelling transformation, 3D to 2D viewing transformation, clipping and hidden surface removal and scan conversion (rendering). **Prerequisite: None**

PRG601 The Advanced Web Developer Bootcamp 4.5

Make REAL web applications using cutting-edge technologies; Build responsive applications using modern CSS technologies like flexbox; Build JSON APIs using Node, Express and MongoD; Learn the most popular front end library React and master the fundamentals around state, props and the component lifecycle; Use babel and webpack to transpile and bundle code**. Prerequisite: None**

PRG602 Full Stack Java Developer 4.5

Students able to build a fully functioning web application through a simplistic step from a professional trainer; Java programming language; Learn Java server pages, servlets, and JSTL from the basics to advance; Understand building web forms with JSP. **Prerequisite: None**

PRG603 Web Application Development with Javascript and MongoDB 4.5

In this course, you will develop more advanced web application programming skills. You will learn how to control data read and write access using methods, publish and subscribe. You will learn how to access your database and server shells using command line tools. You will use the Simple Schema system to validate data and generate input forms automatically. You will see a complete collaborative code editing environment, Text Circle, being built from scratch. **Prerequisite: None**

PRG604 Full Stack Cloud Developer 4.5

No prior programming experience or Cloud background is required to start this program. You'll skill up with the tools and technologies that successful software developers use to build, deploy, test, run, and manage Full Stack Cloud Native applications, giving you the practical skills to begin a new career in a highly in-demand area. The courses in this program will help you develop skill sets in a variety of technologies including: Cloud foundations, HTML, CSS, JavaScript, GitHub, Node.js, React, Cloud Native practices, DevOps, CI/CD, Containers, Docker, Kubernetes, OpenShift, Istio, Python programming, Databases, SQL, NoSQL, Django ORM, Bootstrap, Application Security, Microservices, Serverless computing, and more. **Prerequisite: None**

QNT392 Quantitative Methods for Decision Making 4.5

In this course participants will be introduced to the theory and practice of decision-making methods and tools in a quantitative context. During the course, participants will learn the meaning and the fundamentals of statistics and how it impacts decision making. The course will help participants appreciate the importance of understanding statistics as the foundation of all other techniques. **Prerequisite: None**

QNT501 Statistical Techniques 4.5

This course introduces students to the philosophy and methods of modern statistical data analysis and inference. The course has a strong emphasis on computing and graphical methods, and uses a variety

of real-world problems to motivate the theory and methods required for carrying out statistical data analysis. **Prerequisite: None**

SCM601 Supply Chain Business Process Design 4.5

This course examines both manufacturing and administrative/ service processes to include the traditional/ classical methods of process analysis. Major focus of the course is on current methods such as work- group analysis and cross-functional analysis. **Prerequisite: None**

SCM602 Supply Chain Inventory Management 4.5

This course will focus on the design of the distribution system and the planning and control system used to manage the supply chain. It provides students with the concepts of purchasing and inventory management to include purchasing and inventory planning processes, supplier selection, contract negotiations, "Green" policies, and procurement. **Prerequisite: SCM601**

SCM603 Supply Chain Management Operations 4.5

The course examines supply chain management including sourcing, manufacturing, distribution, technologies, and quantitative models used in managing the supply chain. It exposes students to the buyer supplier relationship as well as topics related to design and management of supply chains, from incoming raw materials to final product delivery. **Prerequisite: None.**

TEC511 Data Visualization and Business Intelligence 4.5

The course gives an overview of how business intelligence technologies can support decision making across any number of business sectors. These technologies have had a profound impact on corporate strategy, performance, and competitiveness and broadly encompass decision support systems, business intelligence systems, and visual analytics. **Prerequisite: None.**

UIX601 User Interface Design 4.5

The course is built around design assignments for a graphical user interface: topics include writing for web, information architecture, interface design, images, product identity, design for behavior, and ethics. The project includes paper prototyping, graphic design, digital prototyping and simulation of interactivity using prototyping technology (eg. Figma, Illustrator, Photoshop). **Prerequisite: None.**

UIX602 Graphics and Animation 4.5

To train the students to acquire skills in generating marketable computer graphics and animated pictures, especially in the area of advertisements. Students to acquire skills and mastery in the use of different software producing graphics and animation. To impart real-life advertisement exposure in an organization/PTC (Production cum Training centre) under OJT. **Prerequisite: None.**

UIX603 Operating Systems and Computer Architecture 4.5

Covers the classical internal algorithms and structures of operating systems, including CPU scheduling, memory management, and device management. Considers the unifying concept of the operating system as a collection of cooperating sequential processes. Covers topics including file systems, virtual memory, disk request scheduling, concurrent processes, deadlocks, security, and integrity. **Prerequisite: None.**

UNIX604 Unix Programming 4.5

Introduces the UNIX/Linux operating system, including task scheduling and management, memory management, input/output processing, internal and external commands, shell configuration, and shell customization. Explores the use of operating system utilities such as text editors, electronic mail, file management, scripting, and C/C++ compilers. Discusses trends in UNIX/Linux, including use of graphical user interfaces**. Prerequisite: None.**