GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(GITAM)
(Deemed to be University, Estd. u/s 3 of UGC Act 1956)
*VISAKHAPATNAM*HYDERABAD*BENGALURU
Accredited by NAAC with 'A' Grade

NEW REGULATIONS & SYLLABI

Of

Post-Graduate Diploma in FinTech:(1-Year) &
Master of Business Administration (FinTech): (2-Years)

Program Codes:
Post-Graduate Diploma(FinTech): MPD
Master of Business Administration (FinTech) : MFT/MFA

(*w.e.f.June 2019*)

Website: **www.gitam.edu**

GITAM FinTech Academy
GITAM INSTITUTE OF MANAGEMENT
GITAM University

Post-Graduate Diploma (FinTech)& MBA (FinTech)

Introduction

GITAM FinTech Academy of GITAM Institute of Management (GIM), a constituent institute of GITAM University (GU), is offering a Post-Graduate Diploma in Financial Technologies (FinTech) in partnership with Andhra Pradesh Electronic and Information Technologies (APEITA), UBS Business Solution India (Pvt.) Ltd. (UBS) and Broadridge Financial Solutions India Pvt Ltd., starting from June 2017, a first of its kind in the country.

Leading business schools across the globe are reinventing themselves by offering courses that are relevant to organizations, by providing necessary competency based curriculum that are required in the "real world". In this dynamic global environment, it is the right time to relook and redesign the program as per social and corporate needs. This program is an initiative in this direction, where our corporate partners, have helped in designing the curriculum and will also provide resources for the delivery of the program. FinTech curriculum is new and we would like to take the lead in shaping the future of our students into a nascent industry that is ripe for fruition. We have successfully rolled out the FinTech certification program, which is well received by students of both Engineering and Management disciplines.

Aim

From a customer service perspective: GU aims to impart confidence and groom future leaders with innovative thinking, who are caring, humane, takes ownership & pride in resolving real-life challenges. This program aims to fuse finance and technology in a curriculum that would help students meet the ever growing needs of FinTech industry.

From an institute perspective: we aim to position ourselves as one of the best, innovative national B-Schools and aims to acquire international accreditation, by developing competency based curriculum that is relevant to the current business environment.

Objectives of the Program:

GU plans to achieve its aims with the following objectives.

- To build a competency based curriculum, clearly identifying the skill set that students will acquire in each of the courses taken.
- To provide contemporary infrastructure and create an atmosphere where learning is fun and challenges are taken with pride.
- To help students ponder and evaluate current technological, economic, political, global and environmental issues and steer them to identify solutions.
- To seed, nurture and groom innovative ideas from students, leading them to setting up their dream FinTech enterprise.

1.0   ADMISSION

1.1   Admission into Post-Graduate Diploma (FinTech) and MBA (FinTech) Programs of GITAM University are governed by GITAM University admission regulations.

2.0   ELIGIBILITY CRITERIA

2.1   A Bachelor Degree or equivalent examination with 60% aggregate marks approved by GITAM University.

3.0 PROGRAM EDUCATIONAL OBJECTIVES

Our program will produce students who:
1. Are competent, creative, and highly valued professionals in industry, academia, or government.
2. Are flexible and adaptable in the workplace, possess the capacity to embrace new opportunities of emerging technologies, and embrace leadership and teamwork opportunities, all affording sustainable management careers.
3. Continue their professional development by obtaining advanced degrees in Management or other professional fields.
4. Act with global, ethical, societal, ecological, and commercial awareness expected of practicing management professionals.

3.1 PROGRAM OUTCOMES

Our program will produce students who have attained:
- An ability to apply knowledge of management skills;
- An ability to design and conduct data analysis and interpret data;
- An ability to function in multi-disciplinary teams;
- An ability to identify, formulate, and solve management problems;
- The broad education necessary to understand the impact of management solutions in a global and societal context;
- An ability to use the techniques, skills, and modern tools necessary for management practice.
- The acumen to optimally apply cutting-edge technical solutions to solve financial and management business problems.

3.2 STRUCTURE OF THE PROGRAM

The Program Consists of

Inter-disciplinary modules of Computer Science/Technology and Management
a) Each modules is assigned a certain number of credits depending upon the number of contact hours (lectures & tutorials) per week.

b) In general, credits are assigned to the courses based on the following contact hours per week per trimester.
- One credit for each Lecture / Tutorial hour per week.
- One credit for two hours of practical per week.
- Two credit for three (or more) hours of practical per week.
  a. Range of Credits

Course	Range of Credits
Theory	2 to 6
Practical	2 to 3

Project Work	1 to 5
Professional Competency Development	1 or 2
Viva Voce	1 or 2
Seminar	1 or 2

3.2.1 CREDITS OF THE PROGRAM

Those who are pursuing the Post-Graduate Diploma (FinTech) Program will have to complete three trimesters (1-year) as per the credits shown below.

Those who continue after the first three trimesters and would like to obtain their MBA(FinTech) degree will have to complete the next three trimesters as per the credits shown below.

Trimester-wise: Subjects & Credits

Trimester	Subjects	Credits	YrCrdt
I	5	15	
II	4	14	
III	8	25	54
IV	5	15	
V	5	16	
VI	7	21	52
			106

Specialization-wise:Subjects &Credits

Specialization	Subjects	Credits
Management	7	21
Finance	7	22
Technology	9	30
HR	1	3
FinTech	2	6
Marketing	2	6
Comm	1	3
MOOC	2	6
Analytics	2	6
Entrepreneurship	1	3
		106

Specialization Trimester-wise Subjects

Specialization	I	II	III	IV	V	VI	Tot
Management	1	0	1	1	1	3	7

Finance	1	1	2	0	2	1	7
Technology	1	2	2	2	1	1	9
HR	0	0	0	1	0	0	1
FinTech	0	0	1	0	0	1	2
Marketing	0	1	0	0	1	0	2
Comm	1	0	0	0	0	0	1
MOOC	0	0	1	0	0	1	2
Analytics	1	0	0	1	0	0	2
Entrepreneurship	0	0	1	0	0	0	1

	No. Of Courses:	34

Courses Offered

Sl No.	Course #	Description	Specialization	Crdts	Type	Trim
1	MFT701	Buss Env & Strategic Mgmt	Management	3	Foundation	I
2	MFT716	Micro & Macro Economics	Finance	3	Core	I
3	MFT719	R & Matlab Programming	Technology	3	Core	I
4	MFT710	Statistics	Analytics	3	Foundation	I
5	MFT713	Business Communications	Comm	3	Foundation	I
6	MFT702	Financial Management	Finance	3	Foundation	II
7	MFT717	Python Programming	Technology	4	Core	II
8	MFA702	Database Systems	Technology	4	Foundation	II
9	MFA705	Marketing Management	Marketing	3	Foundation	II
10	MFA703	Stocks, Bonds, Derivatives & Risk	Finance	4	Core	III
11	MFA706	Web Technologies	Technology	3	Core	III
12	MFA709	Artificial Intelligence/Machine Learning	Technology	3	Core	III
13	MFT715	Entrepreneurship	Entrepreneurship	3	Core	III
14	MFT718	Technical & Fundamental Analysis	Finance	3	Core	III
15	MOE703 *	Online Course-I	MOOC	3	Elective	III
16	MFT714	Project-I	FinTech	3	Elective	III
17	MFT793	Viva-I	Management	3	Core	III
18	MFT813	Human Resource Management	HR	3	Foundation	IV
19	MFT816	Hadoop	Technology	3	Core	IV
20	MFT807	Business Analytics	Analytics	3	Foundation	IV
21	MFT819	Cryptography & Cyber Security	Technology	3	Core	IV
22	MFT891	Internship	Management	3	Core	IV
23	MFT802	Banking, Mortgage & Insurance	Finance	3	Foundation	V
24	MFT817	Blockchain	Technology	4	Core	V
25	MFT808	Digital Marketing	Marketing	3	Foundation	V
26	MFT814	Mergers, Acquisition & Intl Finance	Finance	3	Core	V

27	MFA802	Cyber Laws	Management	3	Foundation	V
28	MFT806	Design Thinking	Management	3	Core	VI
29	MFT809	Security Analysis & Port Mgmt	Finance	3	Core	VI
30	MFT818	Corporate Governance, Compliance & Ethics	Management	3	Foundation	VI
31	MFA803	Cloud Computing	Technology	3	Core	VI
32	MOE809 *	Online Course-II	MOOC	3	Elective	VI
33	MFT892	Project-II	FinTech	3	Elective	VI
34	MFT893	Viva-II	Management	3	Core	VI

* MOE: Is open elective course, only for PGD(FinTech) & MBA(FinTech) **106**

Learning Outcome Matrix												
Core Subject	Business Ethics	Social Responsibility	Cross Cultural Understanding	Global Exposure	Business Environment	Domain Knowledge	Effective Communication	Leadership and Teamwork	Critical Thinking	Business Analysis	Problem Solving	Innovation
Buss Env & Strategic Mgmt	✓		✓	✓	✓	✓				✓		
Micro & Macro Economics		✓		✓	✓	✓					✓	
R & Matlab Programming						✓				✓	✓	
Statistics						✓				✓	✓	
Business Communications		✓	✓				✓	✓				
Financial Management				✓	✓	✓					✓	
Python Programming						✓			✓	✓	✓	✓
Database Systems						✓				✓	✓	✓
Marketing Management	✓	✓	✓		✓	✓		✓			✓	
Stocks, Bonds, Derivatives & Risk	✓			✓	✓	✓		✓		✓	✓	
Web Technologies						✓					✓	✓
Artificial Intelligence/Machine Learning	✓					✓				✓	✓	
Entrepreneurship	✓		✓	✓	✓				✓	✓	✓	✓
Technical & Fundamental Analysis				✓	✓	✓			✓	✓	✓	✓
Online Course-I			✓	✓	✓	✓			✓			
Project-I						✓			✓	✓	✓	✓
Viva-I			✓		✓	✓	✓		✓			
Human Resource Management	✓		✓	✓		✓		✓				
Hadoop						✓				✓	✓	
Business Analytics					✓	✓				✓	✓	✓

Cryptography & Cyber Security				✓							✓	✓
Internship	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Banking, Mortgage & Insurance	✓			✓	✓	✓			✓		✓	
Blockchain					✓						✓	✓
Digital Marketing			✓		✓	✓					✓	✓
Mergers, Acquisition & Intl Finance	✓	✓		✓		✓				✓		
Cyber Laws	✓	✓	✓	✓		✓					✓	
Design Thinking	✓					✓			✓	✓	✓	✓
Security Analysis & Port Mgmt				✓		✓				✓	✓	
Corporate Governance, Compliance & Ethics	✓	✓	✓	✓	✓						✓	
Cloud Computing				✓		✓				✓	✓	
Online Course-II			✓	✓	✓	✓			✓			
Project-II					✓				✓	✓	✓	✓
Viva-II			✓			✓	✓		✓			

3.2.3 Course Structure

	Subjects	Credits	I	II	III	IV	V	VI
Core	18	57	2	1	6	3	2	4
Foundation	12	37	3	3	0	2	3	1
Elective	4	12	0	0	2	0	0	2
	34	106	5	4	8	5	5	7

Trimester-I Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT701	Management	Buss Env & Strategic Mgmt	3		3	40	60	100	3
2	MFT716	Finance	Micro & Macro Economics	3		3	40	60	100	3
3	MFT719	Technology	R & Matlab Programming	3	1	4	40	60#	100	3
4	MFT710	Analytics	Statistics	3		3	40	60	100	3
5	MFT713	Comm	Business Communications	3		3	40	60	100	3
			Totals:	15	1	16	200	240	500	15

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

Trimester-II Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT702	Finance	Financial Management	3		3	40	60	100	3
2	MFT717	Technology	Python Programming	4	1	5	40	60#	100	4
3	MFA702	Technology	Database Systems	4	1	5	40	60#	100	4
4	MFA705	Marketing	Marketing Management	3		3	40	60	100	3
			Totals:	14	2	16	160	120	400	14

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

Trimester-III Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFA703	Finance	Stocks, Bonds, Derivatives & Risk	4		4	40	60	100	4
2	MFA706	Technology	Web Technologies	3	1	4	40	60#	100	3
3	MFA709	Technology	Artificial Intelligence/Machine Learning	3		3	40	60	100	3
4	MFT715	Entrepreneurship	Entrepreneurship	3		3	40	60	100	3
5	MFT718	Finance	Technical & Fundamental Analysis	3		3	40	60	100	3
6	MOE703 *	MOOC	Online Course-I	3		3	40	60	100	3
7	MFT714	FinTech	Project-I	3		3	100		100	3
8	MFT793	Management	Viva-I	3		3	100		100	3
			Totals:	25	1	26	440	300	800	25

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
* MOE: Is open elective course, only for PGD(FinTech) & MBA(FinTech)
#: 40 marks for external and 20 marks for practical

Trimester-IV Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT813	HR	Human Resource Management	3		3	40	60	100	3
2	MFT816	Technology	Hadoop	3	1	4	40	60#	100	3
3	MFT807	Analytics	Business Analytics	3		3	40	60	100	3
4	MFT819	Technology	Cryptography & Cyber Security	3		3	40	60	100	3
5	MFT891	Management	Internship	3		3		100	100	3
			Totals:	15	1	16	160	280	500	15

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

Trimester-V Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT802	Finance	Banking, Mortgage & Insurance	3		3	40	60	100	3
2	MFT817	Technology	Blockchain	4	1	5	40	60#	100	4
3	MFT808	Marketing	Digital Marketing	3		3	40	60	100	3
4	MFT814	Finance	Mergers, Acquisition & Intl Finance	3		3	40	60	100	3
5	MFA802	Management	Cyber Laws	3		3	40	60	100	3
			Totals:	16	1	17	200	240	500	16

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

Trimester-VI Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT806	Management	Design Thinking	3		3	100		100	3
2	MFT809	Finance	Security Analysis & Port Mgmt	3		3	40	60	100	3
3	MFT818	Management	Corporate Governance, Compliance &	3		3	40	60	100	3

			Ethics							
4	MFA803	Technology	Cloud Computing	3		3	40	60	100	3
5	MOE809 *	MOOC	Online Course-II	3		3	40	60	100	3
6	MFT892	FinTech	Project-II	3		3	40	60	100	3
7	MFT893	Management	Viva-II	3		3	100		100	3
			Totals:	21	0	21	400	300	700	21

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment

* MOE: Is open elective course, only for PGD(FinTech) & MBA(FinTech)

#: 40 marks for external and 20 marks for practical

4.0 OPEN ELECTIVES

Student has to choose one open online elective for PGD and two for MBA, from any relevant open online courses available during their study period i.e. at any trimester during first year or second year course of study**.**

Each course has 3 credits. Credits will be shown in III and VI Trimester only. The courses can be chosen from MOOC, Coursera, University offered open electives and certification courses, BSE, & NSE certification courses.

5.0 MEDIUM OF INSTRUCTION

The medium of instruction (including examinations and project reports) shall be English.

6.0 REGISTRATION

Every student has to register himself/herself for each trimester individually at the time specified by the Institute / University.

7.0 ATTENDANCE REQUIREMENTS

7.1 A student whose attendance is less than 75% in all the courses put together in any trimester will not be permitted to attend the end-trimester examination and can be detained.

7.2 However, the Vice Chancellor on the recommendation of the Principal / Director of the University College / Institute may condone the shortage of attendance to the students whose attendance is between 66% and 74% on genuine medical grounds and on payment of prescribed fee. Any student with less than 66% attendance, even on medical grounds, will not be permitted to attend the end-trimester examination and can be detained.

8.0 EVALUATION

8.1 The assessment of the student's performance in each course shall be based on continuous evaluation (40 Marks) and Trimester-end examination (60 Marks).

8.2 A student has to secure an aggregate of 40% in the course in the two components put together to be declared to have passed the course, subject to the condition that the candidate must have secured a minimum of 24 marks (ie 40%) in the theory component at the trimester-end examination.

8.3 The marks for each component of assessment are as shown in the Table 2.

Table 2: Assessment Procedure

S. No.	Component of Assessment	Marks Allotted	Type of Assessment	Scheme of Evaluation
1	Theory/Practical	40	Continuous Evaluation	i) Twenty (20) marks for mid trimester examinations ii) Fifteen marks (20) for Assignment/Seminar/Mini-project/ Research paper /Field Projects/ Viva-Voce/Workshop/presentations/case analysis/GDs
		60	Trimester-end Examination	Sixty (60) marks for Trimester end examinations Note: In respect of courses having practicals, theory examination shall be for forty (40) marks and practical exam for twenty (20) marks.
	Total	100		
2	Practicals (ITM)	100	Continuous Evaluation	i) 40 marks for lab performance, record and viva-voce ii) 60 marks for two tests of 30 marks each (one at the mid-term and the other towards the end of the trimester) conducted by the concerned lab teacher.
3	Project work (6 weeks)	100	Continuous Evaluation	i) Project report carries 50 marks ii) Project viva voce carries 50 marks
4	Social Project/minor project	50	Continuous Evaluation	i) 30 marks for project report ii) 20 marks for viva voce
5	Research paper /venture planning /project report	200	Continuous Evaluation	i) 150 marks for report submission ii) 50 marks for viva voce
6	Year end viva voce	100	Continuous Evaluation	i) Student will be examined on the comprehensive knowledge on the course he/she studies in that year.

Mandatory in every Course:

- Class Attendance – 100% Attendance is a reflection of one's commitment, discipline, time management that facilitates continuous learning.

- Presentations – This is designed to shed inhibitions of public-speaking, within a controlled class-room environment.

- Case Analysis– This is designed to improve analytical skills and proposal/reflective writing skills.

- Field Projects – Application of theoretical knowledge to practical real-world problems, not only provides an end-solution, but reinforces confidence and zeal to take up bigger challenges. Field or industry projects help groom students to working environment.

- Viva-voce – This is designed to test comprehensive knowledge gained and articulation style.

- Research Papers – Research is the lifeblood of an educational institution, whose results contribute to the growth of the economy. Students are provided an opportunity to work with faculty in their desired discipline and generate research project/papers that can be published.

- Workshops – 2 to 6 days workshops can be conducted as per the requirement of the Course

- Computer application – Usage of application or Developing a program, model, portal, application may be used for evaluation

8.2 Trimester End Examination:

Examinations are not the end, but a launching platform into brighter future. The knowledge gained during the trimester, are tested through the trimester end-examinations. The duration of each trimester end-examination shall be for 3 hours.

Students are updated on the examination rules during admission and at regular intervals. Violation of norms regarding behavior in the examination hall will attract severe penalty. Action, as per the University guidelines would be taken against students found copying in the examination halls.

Student shall not be absent for any of the end-term examinations conducted by the Institute. In case the student is absent, in exceptional cases on application, the Institute will decide the merits of the application on a case to case basis.

8.3 Duration and Pattern of Trimester end Examination:

Duration of the Examination is 3 hours.

A. The following shall be the structure of question paper for courses with Case Studies

S.No.	Pattern	Marks
1.	**Section A :** Five one page answer questions (Five out of Eight to be answered).	5 X2= 10 marks
2.	**Section B :** Five Essay type questions (either or choice Questions from each unit)	5 X8 = 40 marks
3.	**Section C : One Caselet** (not more than 200 words)	1X10 =10 marks
	Total	**60 marks**

B.   The following shall be the structure of question paper for courses with numerical problems.

S.No.	Pattern	Marks
1.	**Section A :** Five questions (both theory / problems)(Five out of Eight to be answered).	5X 4 = 20 marks
2.	**Section B : Problems/Theory** (Five out of Eight to be answered)	5X 8 = 40marks
	Total	**60 marks**

8.4 Viva-Voce:

Comprehensive Viva-voce will be arranged at the end of IIIand VI trimesters. The contents, marks and the composition of Board of each Viva-Voce shall be as follows:

Comprehensive Viva on all the courses of study, industrial visits and projects: 100 marks. Viva-voce examination board will consist of one external Professor/Executive from the industry, one senior Faculty from the Institute and Program Coordinator/Assistant Program Coordinator/Principal/Vice-Principal.

8.5 Project/Internship Seminar/Presentation:

The evaluation board will consist of Principal, Project Guide from the Institute, One External Professor/one Senior Executive from Industry and the Program Coordinator/Assistant Program Coordinator.

9.0 EVALUATION GRIEVANCE REDRESSAL PROCEDURE

The term-end examination will be evaluated internally. Students are given an opportunity to redress any grievances they have on the grades awarded, by following the below process.

- Once the evaluation of the term-end is completed, answer scripts are shown to the students.
- Students are given the marks in the class or are placed online for review.
- If there is a concern, students are required to review the paper and verify the marks, with help from the program coordinator.
- Clarify any doubts if they have, with the concerned faculty.
- If they still have a concern, they can submit a written grievance to the Program Coordinator.
- Dean& Principal will appoint a Grievance Redress Committee, which will review the student paper.
- The Dean shall review the grievance committee views and shall make the decision, which is binding and final.
- This final decision will be communicated to the student by the Program Coordinator.
- A student who has secured "F" grade in project work/social project/viva voce shall have to improve his/her report and reappear for viva voce of project work at the time of special examination to be conducted in the summer vacation.

9.1 Supplementary Examination

After the announcement of the term end results, Supplementary Examination is conducted before the completion of next trimester, by fulfilling the conditions specified.

10.0   SPECIAL EXAMINATION

A student who has completed the stipulated periods of study for the PGDip/MBA program and still has failure grade 'F' in not more than 3 theory courses, excluding practical examination, Viva-voce and Project viva, may be permitted to appear for special examinations, which shall be conducted during the summer vacation at the end of the last academic year.

11.0 BETTERMENT OF GRADES

Students who secured second class or pass who wish to improve their grades will be permitted to improve their grades at the end the program.

1. Students who have passed all the courses of a program within the stipulated period of study and who have obtained a Pass or Second Class only are eligible for Betterment of Grades.
2. Candidates who have already secured First Class or First Class with Distinction are not eligible for betterment of Grades.

3. Candidates who have completed the program of study beyond the stipulated period of study i.e. through Special examinations or subsequently, are not eligible for betterment of Grades.
4. Betterment of Grades is permitted only through appearance of the theory examinations.
5. Betterment of Grades is permitted only once, at the end of the program of study, simultaneously along with Special examinations.
6. Candidates can appear for betterment at one course/subject per trimester, for the number of trimesters they have studied. A six trimester MBA student can appear for betterment in any six courses/subjects. For a three trimester PGDip students can appear for betterment in any of three courses/subjects. The rules & regulations framed by the University from time to time shall be applicable.
7. The better Grade secured either in the first or betterment appearance shall be considered as the final Grade.
8. New Grade Card/PC shall be issued to candidates who have improved their Grades/Class after submitting the old Grade Card/PC.
9. The date, month and year of the declaration of betterment result shall be printed on the Grade Card/PC
10. Betterment marks shall not be taken into consideration for award of ranks, prizes, and medals.
11. Candidates have to pay a betterment fee as prescribed by the University.

12.0 GRADING SYSTEM

12.1   Based on the student performance during a given **trimester**, a final letter grade will be awarded at the end of the **trimester** in each course. The letter grades and the corresponding grade points are as given in Table 3.

TABLE 3: GRADES & GRADE POINTS

S.No.	Grade	Grade Points	Absolute Marks
1	O (outstanding)	10	90 and above
2	A+ (Excellent)	9	80 to 89
3	A (Very Good)	8	70 to 79
4	B+ (Good)	7	60 to 69
5	B (Above Average)	6	50 to 59
6	C (Average)	5	45 to 49
7	P (Pass)	4	40 to 44
8	F (Fail)	0	Less than 40
9	Ab.(Absent)	0	--

12.2 A student who earns a minimum of 4 grade points (P grade) in a course is declared to have successfully completed the course, and is deemed to have earned the credits assigned to that course, subject to securing a GPA of 5 for a pass in the semester.

This is applicable to both theory and practical papers. In the case of project Report (dissertation) and Vice-Voce also, the minimum pass percentage shall be 40%.

12.3 The following grading matrix that will be used while grading papers.

(0-20%)	Little or no relevant material presented. Unclear or unsubstantiated arguments with very poor accuracy and understanding. Little evidence of achievement of the relevant stated learning outcomes of the course unit.
(20-40%)	Reveals a weak understanding of fundamental concepts with no critical analysis. Produces answers which may contain factual and/or conceptual inadequacies. Provides poorly written answers that fail to address the question, or answers that are too brief to answer the question properly. Provides solutions to calculative questions that demonstrate inadequate analytical skills.
(40-60%)	Demonstrates good understanding of the material. Shows a basic knowledge of relevant literature but draws mainly on lecture material. Addresses the questions and demonstrates reasonable writing skills with some ability to structure the material logically. Provides solutions to calculative questions that demonstrate good analytical skills.
(60-80%)	Demonstrates an ability to integrate the concepts introduced and applies them to problems with some evidence of critical analysis. Shows evidence of reading beyond lecture notes that is appropriately analyzed and evaluated. Provides clear and competent answers to the questions, well written. Clearly presents solutions to calculative questions and demonstrates very good analytical skills.

	Demonstrates the ability to evaluate concepts and assumptions critically and to thoughtfully apply concepts to problems. Demonstrates independent thinking and insight into theoretical issues. Shows evidence of extensive reading beyond the lecture notes and the ability to synthesize and integrate the relevant literature. Writes well and structures the response so as to provide a succinct, coherent and logical answer. Clearly presents solutions to calculative questions and demonstrates excellent analytical skills.
(80-100%)	

13.0   GRADE POINT AVERAGE

13.1   A Grade Point Average (GPA) for the semester/trimester will be calculated according to the formula:

$$GPA = \frac{\Sigma\,[\,CxG\,]}{\Sigma\,C}$$

Where

C = number of credits for the course,
G = grade points obtained by the student in the course.

13.2   GPA is awarded to those candidates who pass in all the subjects of the semester/trimester. To arrive at Cumulative Grade Point Average (CGPA), a similar formula is used considering the student's performance in all the courses taken, in all the semesters/trimesters up to the particular point of time.

13.3   CGPA required for classification of class after the successful completion of the program is shown in Table 4.

Table 4: CGPA required for award of Class

Distinction	$\geq 8.0^*$
First Class	≥ 6.5
Second Class	≥ 5.5
Pass	≥ 5.0

* In addition to the required CGPA of 8.0, the student must have necessarily passed all the courses of every semester in first attempt.

14.0   ELIGIBILITY FOR AWARD OF POST GRADUATE DIPLOMA (FinTech)

PGD (FinTech) programis of three-trimesters for duration of one year. If due to some unavoidable circumstances a student could not complete the course requirement within the period, a student may extend and complete the program in not more than three years including study period. However such dispensation can only be approved by the Vice Chancellor, based on individual's application requesting dispensation and justifying the need.

A student shall be eligible for award of the PGD(FinTech) if they fulfill the following conditions.
i)   Registered and successfully completed all the courses and projects.
ii)   Successfully acquired the minimum required credits as specified in the curriculum within the stipulated time.
iii)   Have no dues to the Institute, Hostels, Libraries, NCC/NSS, etc.

iv)   No disciplinary action is pending against them.

15.0   ELIGIBILITY FOR AWARD OF MBA (FinTech) DEGREE

MBA(FinTech) programis of six-trimesters for a duration of two years. If a student after completion of the Post Graduate Diploma (FinTech) wishes to get some work experience before completing the rest three trimesters to obtain MBA(FinTech), may do so, on approval from the Vice Chancellor. This is with an aim to complete the MBA(FinTech) curriculum within 6 years including the study period. It may be noted that the courses offered after a period of gap may not be the same that was offered when the student joined the program. The student is required to complete the rest three trimesters, based on the relevant courses that are offered during that period. However such dispensation can only be approved by the Vice Chancellor, based on individual's application requesting dispensation and justifying the need. A student shall be eligible for award of the MBA(FinTech) degree if they fulfill the following conditions.

i)   Registered and successfully completed all the courses and projects.
ii)   Successfully acquired the minimum required credits as specified in the curriculum within the stipulated time.
iii)   Have no dues to the Institute, Hostels, Libraries, NCC/NSS, etc.
iv)   No disciplinary action is pending against them

16.0 PEDAGOGY

The class room pedagogy is customised by individual faculty to enhance the learning experience, which is dependent on the course and the degree of absorption by students. It has been proven that the degree of absorption is directly proportional to self-learning or preparedness before the classroom sessions and the interactions during the classes. Knowledge thus gained builds a strong long-lasting foundation. Typically class room pedagogy ranges from instructions, simulations, case discussions, role plays, etc. Simulations and case discussions are adopted extensively across the curriculum, to supplement class room instructions/lectures. To ensure the learning is wholesome, students are strongly advised to complete the pre-reading and come prepared to every class.

Trimester-I Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT701	Management	Buss Env & Strategic Mgmt	3		3	40	60	100	3
2	MFT716	Finance	Micro & Macro Economics	3		3	40	60	100	3
3	MFT719	Technology	R & Matlab Programming	3	1	4	40	60#	100	3
4	MFT710	Analytics	Statistics	3		3	40	60	100	3
5	MFT713	Comm	Business Communications	3		3	40	60	100	3
			Totals:	15	1	16	200	240	500	15

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFT701	**Course Title**: Business Environment & Strategic Management	
Trimester: I	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

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Course description and learning outcomes

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Any change that a business plans to implement has a strategy. The key to any successful strategy is the thoroughness of its formulation and implementation. As managers, there would come a time when strategic decisions will have to be shouldered, which needs to be made on sound judgment. It is imperative that every Management student is exposed to basic methodology of strategic management and the steps taken for rolling out an effective strategy. The business environment in India is undergoing a dynamic change; what was looked upon as an underdeveloped nation is now regarded as a potential economic power, struggling to take strides in the service industry, providing multinational companies with unparalleled opportunities. With liberalization and privatization taking place in almost all major sectors of the economy, the nature and extent of the role of the state is undergoing fundamental changes; these are excellent portents. In this changing environment of such gigantic dimensions, this course is aimed at sensitizing the students to the value implications of environment on business and the power of sound strategy.

LEARNING OBJECTIVES
- To make the students understand different facets of Indian Business Environment.
- To understand the concepts of Strategy management modules, comprising of scanning external environment, strategic formulation, implementation and control
- To understand the concept of SWOT, Value Chain Model, BCG and Nine-Cell Matrix

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand conceptual framework of business environment and generate interest in international business	A1, A2
2	Understand the concept of competitive advantage and its sources and the ability to recognize it in real-world scenarios.	A3
3	Analyze the main structural features of an industry and develop strategies.	A3
4	Demonstrate the ability to think critically in relation to a particular problem, Situation or strategic decision through real-world	A3

	scenarios	
5	Apply the learnings to industry cases and develop strategies	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction: The concept of Business Environment-Environmental Scanning-Internal and External environments- SWOT, PESTEL and Industry Analysis.

Unit II (6 sessions)

Economic Environment: Philosophies of Capitalism, Socialism and Mixed Economy-Public Private Partnership-Industrial Corridors, Special Economic Zones, Ease of Doing business-Balance of payments-Exchange rate movements and the impact on Balance of Payments; Globalization and WTO-Trade Blocs.

Unit III (6 sessions)

Indian Policy Environment: A brief review of industrial policies since independence, Industrial Policy of 1991-Fiscal Policy and Budget, Monetary and Credit Policy, Policy on FDIs and FIIs- India's Trade Policy-Bilateral and Multilateral Trade Agreements-EXIM Policy.

Unit IV (6 sessions)

Strategic Management: Basic concepts of Strategic Management, Business Vision, Mission, and Objectives- Porters Five Force Model, Value Chain Model. Strategic Choice, BCG and Nine-Cell Matrix.

Unit V (6 sessions)

Strategy Formulation and Control: Strategy formulation, strategy implementation and control- Business, Corporate and functional strategies. Strategic Leadership and supportive culture.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2

3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

***Prescribed text book*:**
Thomas L. Wheelen and J. David Hunger, "Concepts in Strategic Management and Business Policy", Pearson, New Delhi, 2011 (latest edition)

***Referential text books and journal papers*:**
Barry J. Witcher&Vin Sum Chau, "Strategic Management Principles & Practice", Cengage Learning, UK, 2010
Charles Hill, Steven McShane, "Principles of Management", Tata McGraw-Hill Education, New Delhi, 2014
Ricky W. Griffin, "Management", Cengage Learning, New Delhi, 2014

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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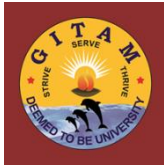
GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFT716	Course Title: Micro & Macro Economics	
Trimester: I	Course Type: Theory	Credits: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

In today's competitive business environment, effective managerial decision making requires use of economic concepts and tools. Business efficiency depends on minimization of cost and maximization of production which requires perfect understanding of the economic concepts like demand, supply, production, cost and market conditions. Managerial economics uses economic concepts and principles by emphasizing on demand analysis, production & cost analysis and different market structures which are fundamental for further study. This course also introduces important macroeconomic concepts which are indispensable for understanding the functioning of an economy.

LEARNING OBJECTIVES

- To understand the key economic concepts which are used for effective decision making.
- To understand and apply demand and supply analysis to business decisions.
- To know the basics of market morphology and identify the different market structures.

On successful completion of this course, students will be able to:

	Learning Outcome	Assessment
1	Apply Economic Concepts for Business Decision Making	A1, A2
2	Apply the market forces in Decision Making	A3
3	Get acquainted with the Different Markets and the Pricing Decisions.	A3
4	Demonstrate the ability to think critically in relation to a particular problem, Situation or strategic decision through real-world scenarios	A3
5	Illustrates how micro and macro economics contributes to business management	A3

Course outline and indicative content

Unit I (6 sessions)

Micro Economics - Scope & importance of Micro Economics. Basic Economic principles - Scarcity, preferences and opportunity costs - Production possible frontiers, Opportunity Costs, Increasing opportunity costs, Economic Growth through investments explained through Shifts in PPF). Demand and Supply Analysis: Law of Demand, law of supply, market equilibrium and price mechanism. Elasticity of demand, types of elasticity, methods

to measure elasticity, Basics Concept of utility – total and marginal utility, Consumer & Producer Theory: Preferences and Utility, Budget Constraints, Deriving Demand Curves, Applying Consumer Theory. Revealed preference Theory and its applications. Demand forecasting – an overview.

Unit II (6 sessions)

Production and Cost Analysis: Productivity and Costs , Production function, Laws of Production - Short run - one variable production function, Long run – Iso-quants, Iso-cost line, producer equilibrium, expansion path, Law of returns to scale. Cost - Cost concepts, Cost output relation - short run cost output relation, long run cost output relation. Economies of scale.

Unit III (6 sessions)

Market Structure: Basis for classification of market power, kinds of competitive market, price and output decisions in perfect competition and imperfect market, Monopoly, Monopolistic, Oligopoly market . Market Failures – public goods, social goods, merit goods, administered prices (ceiling price and floor price) and Externalities – Positive and negative externalities - Dead Weight Loss.

Unit IV (6 sessions)

Macro Economics I: Indicators of macroeconomics. Measuring National Income, circular flow of income and expenditure, GDP, Components of GDP, Real and Nominal GDP. Income and Expenditure, IS-LM Model, AS-AD Model, Marginal Propensity to Consume. Inflation, Measuring inflation, Cost of Living, Deflation, Real & nominal return, The Phillips Curve: Inflation and unemployment.

Unit V (6 sessions)

Macro Economics II - Business cycles -phases of business cycles. Monetary Policy and Fiscal Policy. Measures to control inflation and business cycles. International Trade – Current, Capital and Reserve accounts, Causes of Deficit Balance of Payments and corrective measures. Monetary Systems, Money supply, Functions of money, Fractional reserve accounting and banking.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals,	A1 & A2

	etc.	
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Paul Farnham (2014): Economics for Managers, Global Edition, 3rd Edition, Pearson
Olivier Blanchard, David R. Johnson, Macroeconomics, 6th Ed, Pearson
*Referential text books and journal papers***:**
Morris A. Davis (2009) - Macro Economics for MBAs and Masters of Finance, Cambridge University Press.
Robert Pindyck and Daniel Rubinfeld (2013) – Micro Economics, 8th Edition, Pearson
Paul Keat, Philip K Young, Steve Erfle, Dickinson (2014): Managerial Economics, 7tEdition, Pearson

Suggested journals:

Economist
Indian Economic Review
Journal of Financial Economics
Journal of Applied Economics

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GITAM FinTech Academy

GITAM Institute of Management

Course Code:MFT719	Course Title: R & Matlab Programming	
Trimester: I	Course Type: Theory	Credits: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

R program is an open source programming language that is gaining prominence and used for Big Data analytics. It's simple to use style has gained traction and is widely used among statisticians. The aim of this program is to introduce and get hands on experience in R-programming.

Solving and analyzing large and complex problems have become easy with the use of MATLAB Software package.

- To understand the structure and functions in R.
- To understand the ease and capability of R in data analysis and plotting.
- To understand the basic features of MATLAB
- To understand the applications of MATLAB

On successful completion of this course, students will be able to:

	Learning Outcome	Assessment
1	Understand how to access and open any data file for analysis	A1
2	Demonstrate how to plot from R, based on analytics.	A3
3	Understand MATLAB's applicability into real-life problems.	A2
4	Apply mathematical models to solve a problem using MATLAB	A3
5	Demonstrate Neural network model using MATLAB	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to data analysis: Data Analytics – numerical analysis, pictorial analysis; Data – Classification, types, measurement levels;
Programming in R: R editors; Data types in R – vectors, lists, matrices, arrays, factors and data frames; Variables – naming conventions; Decision making – if statement, if-else statement, if-else-if statement, switch statement; Loops – repeat, while, for statements

Unit II (6 sessions)

Data import & export: Data Import & export - Raw data, text, CSV, Excel, ODS, other alien formats of SAS, SPSS, WEKA etc. Working with data bases – SQL Queries, ODBC, DBF

Unit III: (6 sessions)
Data Analysis: Univariate analysis - measures of central tendency, measures of dispersion and measures of shape Bivariate analysis – cross tabulation, correlation, regression Multivariate analysis – multivariate correlation, multivariate regression.
Plotting with R – Pie Charts, Histograms.

Unit IV: (6 sessions)
Introduction to MATLAB, MAT and MEX files, MATLAB commands, Data types, Vectors & Matrices, Polynomials, Input Output Statements

Unit V: (6 sessions)
Graphics, Control Structures, Vectorization Techniques, MATLAB Applications- Digital Image Processing, Neural Network, Modeling using SIMULINK

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master

certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:

1. An Introduction to R: Tutorial – W. N. Venables, D. M. Smithand the R Core Team – Open source
2. Ram N. Patel, Ankush Mittal, Programming in MATLAB, 2014, Pearson

Course Code: MFT710	**Course Title**: Statistics	
Trimester: I	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Business statistics (BS) are the tools exhaustively used in research to convert a problem or situation into mathematical expressions for analysis. Most of the activities in BS deal with forecasting, analyzing and drawing conclusions from the data. These techniques provide valuable tools for predictive analysis, business decision making and solving Management problems.

LEARNING OBJECTIVES

- To understand and introduce students to the various methods/tools used in Business Statistics.
- To use Business Statistics tools to analyses, interpret, evaluate data and draw conclusions for the business problem

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Perform multiple regression and forecast trend to analyze and measure different trends in data series	A1, A2
2	Understand statistical techniques to solve and test business problems	A3
3	Explore Different Markets and their Pricing models.	A3
4	Demonstrate the ability to think critically in relation to a particular problem, Situation or strategic decision through real-world scenarios	A3

Course outline and indicative content

Unit I (6 sessions)

Statistics overview, Mean, Median, Mode, Range, Interquartile range, variance, standard deviation, population and sample standard deviation. Regression, Relation between partial regression coefficients and correlation coefficients, Standard Error of Estimates for Multiple regression.

Unit II (6 sessions)

Forecasting Trend: Introduction, Linear trend model, Exponential trend, Measurement of Seasonal effects – Method of Simple Average, Ratio-to-Trend Method, Ratio-to-Moving Average Method, Link Relative Method.

Unit III (6 sessions)

Introduction to Probability and Probability Distribution: Concepts of Probability, Additive Theorem and Multiplication Theorem; Binomial, Poisson and Normal Distributions.

Unit IV (6 sessions)

Hypothesis Testing: Introduction, Types of Hypothesis, Hypothesis Testing Procedure, One sample and Two sample Test for Mean (Students t-distribution and Z-test); Introduction to Chi-Square distribution, Chi-Square test for Goodness of fit and for Independence of Attributes.

Unit V (6 sessions)

Analysis of Variance: Introduction, Testing equality of population means (One –Way Classification), Testing equality of population means (Two –Way Classification).

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

***Prescribed text book*:**

J.K Sharma, Business statistics, Pearson Education, New Delhi

***Referential text books and journal papers*:**

Bruce L. Bowerman, Richard T.O'Connell, Emily S. Murphree, Business Statistics in practice, 7th Edition, 2015 McGraw Hill Education (India) Private Ltd. New Delhi.
David M.Levine, David Stephan Timothy C.Krehbiel, Mark 1 Berenson, Statistics for managers using Micro soft Excell,2015, Prentice Hall India Pvt, New Delhi
Amir D.Aczel, JayavelSounderpandian, Complete Business Statistics, 2015, Tata McGraw Hill, New Delhi.
S.P. Gupta &M.P. Gupta, Business Statistics, 2015, Sultan Chand & Sons, New Delhi

Suggested journals:

Journal of Applied Mathematics and Stochastic Analysis, Hindawi Publishing Corporation, Florida Institute of Technology, USA.
International Journal of Operations and Quantitative Management, College of Business, Prairie View A & M University of USA.
Journal of Applied Quantitative Methods, Association for Development through Science and Education, Romania.
Journal of Financial and Quantitative Analysis, Foster School of Business, University of Washington

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Course Code: MFT713	Course Title: Business Communications	
Trimester: I	Course Type: Theory	Credits: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Communication skills have emerged as the most powerful set of skills to possess for accelerating ones career trajectory and speed of accomplishment in every walk of life. Business communication is the kernel of every human activity and endeavor.

LEARNING OBJECTIVES

- To acquire skills in enhancing the appearance and presentation of business correspondence
- To recognize the organization, structures, and characteristics of basic business letters.
- To learn the preferred format for good written reports
- Gain an overall perspective on human communication in the work place
- Demonstrate the importance of interpersonal skills in the work place
- To understand the nature of business communication in terms of business language, letter, memo, and report-writing

On successful completion of this course, students will be able to:

	Learning Outcome	Assessment
1	Will be able prepare and make oral and written presentations	A1, A2
2	Would be able to collaborate in teams with better communication	A3
3	Will be able to prepare technical reports	A3

Course outline and indicative content

Unit I (6 sessions)

Purpose of Business Comms – The Communication Process – Communicating Within Orgs

Unit II (6 sessions)

Communication and the Self – Impression Management – Communication Styles – Nonverbal Communication – Listening As A Communication Skill.

Unit III (6 sessions)

Communicating Electronically: Appropriate Use Of Technology – Electronic Mail – Web Page Comms – Voice & Wireless Comms.

Unit IV (6 sessions)

Preparing Messages: Good & Neutral News Msg – Bad-News Msg – Persuasive Messages – Revising Written Messages

Unit V (6 sessions)

Organizing & Preparing Reports and Proposals: Parts of Formal Reports – Organization of Formal Reports – Short Reports – Parts of a Proposal – Collaborative Skills for Team Writing.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Lehman, Dufrene & Sinha, "Business Communication", *An innovative Approach to Learning and Teaching Business Communication,* Cengage Learning, 2015
*Referential text books and journal papers***:**
Jeff Butterfield, "Soft Skills for Everyone", Cengage learning, 2015

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad

Journal of General Management, Mercury House Business Publications, Limited
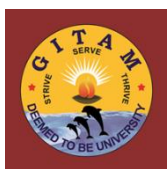Harvard Business Review, Harvard Business School Publishing Co. USA

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Trimester-II Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT702	Finance	Financial Management	3		3	40	60	100	3
2	MFT717	Technology	Python Programming	4	1	5	40	60#	100	4
3	MFA702	Technology	Database Systems	4	1	5	40	60#	100	4
4	MFA705	Marketing	Marketing Management	3		3	40	60	100	3
			Totals:	14	2	16	160	120	400	14

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFT702	**Course Title**: Financial Management	
Trimester: II	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

An effective manager, has the numbers on their fingertips. Every organization's health is reported through the financial statements that they produce and publish annually. As a manager one should be well versed with the various reports, be it Balance Sheet, Income Statement or Profit and Loss statement. To compare how efficient one company is performing with respect to their peers or the industry average, ratio analysis is an effective tool. This course aims to introduce students to financial statements from which ratio analysis and comparison of companies can be done.

LEARNING OBJECTIVES

- To interpret various Financial Statements for Business Decisions.
- To Understand the Business Structure and Process in terms of Finance.
- To understand the flow of fund and resources to acquire it.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand how funds are generated and used in business.	A1, A2
2	Evaluate various decisions related to finance in Business	A3
3	Acquire decisions making skills.	A3
4	Analyze scenarios to study viability of projects	A3
5	Illustrate how one proposal is financially superior over another.	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to Basics of Finance: Introduction to Accounting, IAS, GAAP, Accounting Equation, Journal, Ledger, Trial Balance,Final Accounts: Manufacturing Trading and Profit and Loss Account, Income Statement and Balance Sheet, Funds Flow , Cash Flow ,Ratio Analysis

Unit II (6 sessions)

Source and Investment

Sources of Finance, Goals and Objectives of Finance Function in a Business, Time Value of Money and Annuity, Importance and Complexities of Capital Budgeting, Capital Budgeting Techniques: payback period, Discounted Payback Period, ARR, Net present value, IRR, Profitability Index, Risk Adjusted Capital Budgeting.

Unit III (6 sessions)

Capital Basics

Capital Structure, Ideal Capital Structure, Cost Of Capital of Equity Shares, Preference Shares, Debt, Cost of Retained Earnings, And Weighted Average Cost Of Capital. Leverages: Types of Leverages.

Unit IV (6 sessions)

Operations and Liquidity

Operational Cycle, Working Capital Requirement, Estimation of Working Capital, Fulfilling Working Capital Requirements.

Unit V (6 sessions)

Return Basics

Dividend, Type of Dividends, Dividend policy, Models of Dividend, Legal Procedures and tax Aspects of Dividend Issue.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Financial Accounting by Maheswari and Maheswari
*Referential text books and journal papers***:**
Financial Management by C. Paramasivan& T Subramanian, New Age International Publishers.
Financial management by Shashi K Gupta, Kalyani Publications
Financial Management by khan and Jain, Tata McGraw Hill

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFT717	**Course Title**: Python Programming	
Trimester: II	**Course Type:** Theory/Lab	**Credits**: 4
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Python is an object-oriented interpreted programming language with simple to use syntax and is part of the open source foundation. It uses dynamic typing systems with automatic memory management. It is gaining popularity based on its easy and efficiency of data management, especially for Big Data analytics.

LEARNING OBJECTIVES

- To understand the syntax of Python programming
- To understand object oriented programming concepts like classes and objects
- To understand how Python could be used for data analytics.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand how to use classes and objects	A1, A2
2	Apply Python programming for data analytics	A3
3	Explore the use of Python for front-end design	A3
4	Analyze project requirement and determine libraries that can be used to standardize and modularize the code.	A3
5	Demonstrate extraction of market related data using libraries	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction, installation and using Python, Data Types, Conditional loops, Arrays

Unit II (6 sessions)

Input and Output, Defining and Using Functions, Functional modules.

Unit III (6 sessions)

Internet Programming, Multithreaded programming,

Unit IV (6 sessions)

Database programming, COM Programming.

Unit V (6 sessions)

Web Application programming

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Wesley J. Chun, Core Python Applications Programming, 3rd Edition, Pearson
*Referential text books and journal papers***:**
Robert Sedgewick, Kevin Wayne, Robert Dondero, Introduction to Programming in Python, Pearson
Kenneth A. Lambert, B.L.Juneja, Fundamentals of Python, 2015, Cengage Learning

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited

Harvard Business Review, Harvard Business School Publishing Co. USA

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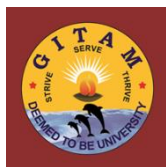
Course Code: MFA702	**Course Title**: Database Systems	
Trimester: II	**Course Type:** Theory/Lab	**Credits**: 4
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Database is the basis on how corporate data is stored and effectively utilized in making decisions. The effectiveness of the database lies in the ease with which a user can access the data when required. This can be ensured by understanding the needs and optimizing the database, to store and retrieve data fast. This course introduces students to the concepts of database creation, storage, retrieving and management of databases.

- To understand the creation, storage and retrieving of data from a database.
- To understand the Structured Query Language (SQL)
- To understand the tasks of database management system.
- To understand NoSQL concepts.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demonstrate writing SQL queries to store and retrieve data.	A1, A3
2	Develop skills to create, maintain a database.	A3
3	Will be able to optimize database queries.	A2
4	Understand MangoDB operations	A3

Course outline and indicative content

Unit I: (6 sessions)
Data, Relational databases, Abstraction, DBMS Structure, DBMS Queries, ER Diagrams, Constraints, Class Hierarchies, Aggregation, Database ACID properties
Unit II: (6 sessions)
Structured Query Language (SQL): Introduction to SQL, data definition commands, data manipulation commands, SELECT queries, advanced data definition commands-advanced SELECT queries, Nested queries, Integrity constraints.

Unit III: (6 sessions)

Advanced SQL: creating a view, joining database tables, Relational set operators, SQL join operators, sub queries, SQL functions.

Unit IV(6 sessions)

MangoDB: Introduction to NoSQL databases, CAP Theorem, Introduction to MangoDB, Data types, Database Create and Drop, Creating a Collection, crud operations in MongoDB

Unit V(6 sessions)

Advanced MangoDB: Indexing in MongoDB, Sorting records, Aggregation functions, Data Backup and Restoration, MapReduce, Text search, Regular expression

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master

certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

***Prescribed text book*:**

1. Ramez Elmasri & Shamkant B. Navathe, Database Systems, Models, Languages, Design and Application Programming, 6th Edition, Pearson.

2. MongoDB: The Definitive Guide by Kristina Chodorow and Michael Dirolf, 3 edition O′Reilly Publications

***Prescribed Reference books*:**

Database Management Systems, Raghu Ramakrishnan, Johannes Gehrke, 4th Edition, McGraw Hill

Course Code: MFA705	**Course Title**: Marketing Management	
Trimester: II	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Marketing is the process of communicating the features and value of a product or service to customers, with an aim to make them their consumers. Marketing Management optimizes resources and activities that gains insights into markets and understand consumer behaviour, based on which suitable products can be positioned and sold. The aim of this course is to introduce the students to the techniques of marketing management.

LEARNING OBJECTIVES

- To understand the functionality and application of elements of marketing mix.
- To be able to create a suitable marketing plan for a product.
- To understand a range of strategies that can be used for product pricing, promotion and distribution

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demostrate strategies of product, price, placement and promotion	A1, A2
2	Understand the life-cycle of the products	A3
3	Understand the application of technology to market products.	A3
4	Analyze different marketing strategies and determine which is the best for a new product	A3
5	Analyze consumer behavior to define marketing strategy	A3

Course outline and indicative content

Unit I (6 sessions)

Definition, Nature, Scope, Core Concepts, Companies orientation towards Marketing, 7 Ps, Developing Marketing Strategies and Plans-Marketing and Customer value

Unit II (6 sessions)

Analyzing Consumer Markets-Factors influencing consumer behaviour, Key Psychological Process, Buying decision Process, Identifying Targeting Markets and Positioning. Product-Types of Product, New Product development Process, Product life cycle, PLC a tool for

strategic planning, designing and managing services-Nature of services, Achieving service excellence, managing service quality.

Unit III (6 sessions)

Understanding Pricing, Setting Price, Adapting Price, Pricing for rural Markets, Initiating and responding to price changes.

Unit IV (6 sessions)

Marketing channels and Value networks. The role of Marketing channels, Channel design decisions,Channel management decisions, Channel integration and systems, Managing channel conflicts, E-Commerce Marketing Practices.

Unit V (6 sessions)

Designing and Managing integrated marketing communications-The role of marketing communications, developing effective communications, Deciding on the marketing communication Mix,Managing the integrated Marketing communication process, Managing Mass communication-Developing and Managing an advertising Program. Media Selection and measuring effectiveness. The direct and digital marketing Managing digital communication online social media and mobile.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Armstrong, Gary and Philip Kotler, Principles of Marketing, Prentice Hall, New Delhi, 2012
Referential text books and journal papers:
Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwar Jha, Marketing Management, Pearson, 14th Edition

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Trimester-III Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFA703	Finance	Stocks, Bonds, Derivatives & Risk	4		4	40	60	100	4
2	MFA706	Technology	Web Technologies	3	1	4	40	60#	100	3
3	MFA709	Technology	Artificial Intelligence/Machine Learning	3		3	40	60	100	3
4	MFT715	Entrepreneurship	Entrepreneurship	3		3	40	60	100	3
5	MFT718	Finance	Technical & Fundamental Analysis	3		3	40	60	100	3
6	MOE703*	MOOC	Online Course-I	3		3	40	60	100	3
7	MFT714	FinTech	Project-I	3		3	100		100	3
8	MFT793	Management	Viva-I	3		3	100		100	3
			Totals:	25	1	26	440	300	800	25

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment

* MOE: Is open elective course, only for PGD(FinTech) & MBA(FinTech)

#: 40 marks for external and 20 marks for practical

Course Code: MFA703	**Course Title**: Stocks, Bond, Derivatives & Risk	
Trimester: III	**Course Type:** Theory	**Credits**: 4
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Any country leading economically, finds its roots in a well-founded, sound financial institution and markets. Financial institutions ensures there is adequate liquidity and is efficiently governed for smooth transfer of funds. Financial institutions (FIs) are specialized business organizations that are acting as mobilizes and depositories of savings and as purveyors of credit or finance. Financial markets are the center of the arrangements that provide facilities for buying and selling of financial claims and services.

Purpose of this course is to provide student with an understanding of the workings of financial markets and institutions specifically in India and how they contribute in the development of financial sector in India. The course provides practical understanding of different financial instruments like stocks, bonds and derivatives and services which are key players in overall development of Indian economy. Those who plan to become financial analysts in organisations need to manage client funds more efficiently by hedging the financial risk using these products.

LEARNING OBJECTIVES
- To understand the importance of Financial institutions and the roles they play
- To provide exposure to the funding channels using capital market.
- To make students aware on the specifics of Stocks and Bonds
- To understand the basic concepts of Forwards , Futures, SWAPS & Options Trading

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand the role of financial institutions in supporting the economy	A1, A2
2	Understand how stocks and bonds are issued and calculate their valuations	A3
3	Evaluate channel to be used for generating funds	A3
4	Analyze Forwards, Futures & Options Trading. Strategize on using the right products to hedge financial risk of a company.	A3
5	Understand how financial products can be used to mitigate risk.	A3

Course outline and indicative content

Unit I (6 sessions)

Financial system –Capital Markets and Money Markets – New Issue Markets – secondary Market, Stocks and its valuations, risk-return trade off, Risk and return of a single stock: measurement of market risk, determinant of beta, relationship between risk and return; dividend policy; Stock Indices. Dividend Discount Model: P/E ratio approach, Preference Stocks; relationship between earnings-price ratio, expected returns and growth; process of taking a business IPO, the minimum criteria, the regulatory framework, initial pricing of Stock through underwriting, ADR, GDR

Unit II (6 sessions)

Introduction to Bonds - Bond Features, Types of Bonds, Bond pricing and Yield, Accrued Interest, Day Count Conventions, Clean and Dirty Bond Prices, Bond / Yield Relationship, Bond price in continuous time, Treasury Bills. Pricing fixed income securities: Bond Instruments and Interest Rates Risk, Duration, Modified Duration and Convexity, Macaulay duration, Relationship between duration, yield, coupon and maturity, Basis Point Value (BPV), Convexity Measure.Yield Curve Analysis: Yield Curve, Different types of yield curve, YTM curve, Par yield curve, Zero coupon (spot) yield curve, Forward curve, Yield curve and yield curve theories, Econometric forecasting of the yield curve, Benchmark curve, Interpreting the Yield Curve/ZCYC.

Unit III (6 sessions)

Introduction of Financial Derivatives: History, types (Forwards, Futures, Options and Swaps), features, uses and myths of financial derivatives; the regulatory framework of financial derivatives in India.Trading mechanism and contracts of the main Financial Derivatives instruments: Clearing and settlement of trades, margin trading.Foreign Exchange Market: Structure, mechanism of currency trading, exchange rate quotations, forward contracts, interest arbitrage, exchange rate regimes and the foreign exchange market in India. Measurement of exposure and risk, managing transaction exposure, operating exposure, short-term financial management in Multinational Corporation.

Unit IV (6 sessions)

Forwards and Futures trading and differences between them: Trading in Forwards, Futures: theory, pricing and hedging strategies for foreign exchange, short and long-term interest rate and Index Futures.

Unit V (6 sessions)

Options Market: Trading and hedging using Options; Currency Options; Options vs. Futures; Option pricing using Black-Scholes Model and Binomial Analysis; Options on Stock Indices and Currency.Swaps Markets: Structure, currency, interest-rate, equity and commodity Swaps.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20

A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Eugene F. Bringham and Joel F. Houston, "Fundamentals of Financial Management", Cengage Learning, New Delhi, 2014
Ranganatham, M., &Madhumathi, R., "Derivatives and Risk Management", Pearson, New Delhi, 2014
*Referential text books and journal papers***:**
Dr. S. Gurusamy, "Capital Markets", Tata McGraw Hill, New Delhi, 2013
Gupta, S. L., "Financial Derivatives, Theory, Concepts & Problems", PHI Learning Pvt. Ltd., New Delhi, 2013
Suggested journals:
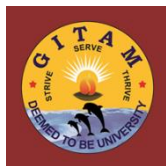
Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFA706	**Course Title**: Web Technologies	
Trimester: III	**Course Type:** Theory/Lab	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Web technologies is a general term referring to the many languages and multimedia packages that are used in conjunction with one another, to produce dynamic web sites such as this one. Each separate technology is fairly limited on it's own, and tends to require the dual use of at least one other such technology. The aim of this program is to introduce and get hands on experience in different components of web technologies.

- To understand the structure HTML and CSS.
- To understand the ease and capability of using client-side scripting languages
- To understand the server-side development
- To understand how to use XML documents

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demonstrate writing a valid standards-conformant HTML document with CSS.	A1
2	Understand web application applicability into real-life problems.	A3
3	Develop a reasonably sophisticated web application	A2
4	Demonstrate development of client-server applications that communicate via XML documents	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to HTML Version5: Basic syntax, HTML document structure, text formatting, images, lists, links, tables, forms, frames, section, article, range and date.

Cascading Style Sheets Version3: Levels of style sheets, style specification formats, selector forms, font properties, list properties, color properties, alignment of text, background images, span and div tags. Responsive web pages using Bootstrap

UNIT- II (6 sessions)
Introduction to Java Script: Overview of java Script, Syntactic characteristics, Primitives, Operator and Expression, control statements, Arrays, functions, errors in scripts, Document Object Model(DOM), Event driven computation, Element access in Java script, The navigator Object.

Dynamic Document with Java Script : Element positioning, Moving elements, Changing colors and fonts, Dynamic content, Locating the mouse Cursor, Slow movements of elements, Dragging and Dropping Elements.

UNIT-III (6 sessions)
Introduction to Angular js: Angular js Expressions, Modules, Data Binding, Controllers, DOM, Events, Forms, Validations.
Introduction to Nodejs: Overview of Node.js, Features of Node.js, Creating Node.js Application, Using Node.js REPL, Node Package Manager, File System module and Directories, Buffers, Streams, and Events, Node.js connects to databases.

Unit IV (6 sessions)
Introduction to PHP: Overview of PHP, general server characteristics, Creating PHP Pages, Form handling, Data Base access with PHP & MySql.

Unit V (6 sessions)
Introduction to XML: Syntax of XML, Document Structure, and Document Type Definition, Namespaces, XML Schemas, Document Object Model, Presenting XML, Using XML Processors: DOM and SAX, XSLT, XPath, XQuery.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Programming world wide web, Robert W.Sebesta , Pearson 4th edition

*Prescribed Reference books***:**
1. Uttam K.Roy, Web Technologies, Oxford Higher Education publication, 2004.
2. Bai Ekedaw, Web Warrior Guide to Web Programmming, ThompsonPublications, 2012.

Course Code: MFA709	**Course Title**: Artificial Intelligence and Machine Learning	
Trimester: III	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Artificial Intelligence has its foundation in Boolean algebra. With the introduction of computers, AI has gained prominence, where attempts were made to make computers think and reason like humans. It has come a long way from playing games to intelligent robots. This program aims to introduce the basic concept AI, Knowledge base and Machine Learning.

- To understand the strategies of state space.
- To understand AI Knowledge representation.
- To understand machine learning

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Apply state space search	A1
2	Understand fundamentals of Machine Learning.	A3
3	Demonstrate capability to Design, develop basic machine learning applications	A2
4	Demonstrate Machine Learning algorithm models	A3

Course outline and indicative content

Unit I (6 sessions)

Graph Theory, Strategies for State Space Search and Control Strategies, Heuristic Search, Monotonicity and Informedness.

Unit II (6 sessions)
Recursion based search, Pattern-Directed search, AI Challenge Knowledge Representation, Problem reduction and game playing,

Unit III (6 sessions)
Artificial Neural Networks, Introduction to Intelligent Agents, Natural Language Processing.

Unit IV (6 sessions)
Definition of learning systems, Goals and applications of machine learning, Aspects of developing a learning system: training data, concept representation, function approximation.

Unit V (6 sessions)

Machine Learning Paradigms: supervised learning models, K-nearest neighbor, decision trees, support vector machines. Unsupervised Learning: K means clustering, hierarchical clustering, Introduction to Reinforcement Learning.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.
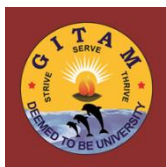
*Prescribed text book***:**
1. Saroj Koushik, Artificial Intelligence, 2016, Cengage Learning
2. Tom Mitchell. Machine Learning, 2017, McGraw Hill

*Prescribed Reference books***:**
Stuart J. Russell, Peter Norvig, Artificial Intelligence, A Modern Approach, 3rd Edition, Pearson

Course Code: MFT715	Course Title: Entrepreneurship	
Trimester: III	Course Type: Theory	Credits: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Entrepreneurship is an essential element for economic progress as it manifests its fundamental importance in different ways: a) by identifying, assessing and exploiting business opportunities; b) by creating new firms and/or renewing existing ones by making them more dynamic; and c) by driving the economy forward - through innovation, competence, job creation- and by generally improving the wellbeing of society.

Understanding the challenges and potential of Entrepreneurship is significant and quite relevant in the context of the recent socio-economic structural changes. It has recently been claimed that if the managers and businessmen of many of our firms were to adopt entrepreneurial behavior when developing their strategies, firms would be facing a much brighter future than otherwise.

LEARNING OBJECTIVES
- To understand Entrepreneurship and Start up culture among the students
- To understand the process of Entrepreneurship & preparing business plans
- To acquaint students with the process of new venture creation
- To facilitate the practices of entrepreneurship by preparing live business plans

On successful completion of this course, students will be able to:

	Learning Outcome	Assessment
1	Understand the need and significance of Entrepreneurship in the Economy	A1, A2
2	Develop Entrepreneurial knowledge and skills	A3
3	Develop Business Plan with the required contents	A3
4	Understand how to incubate an idea and creation of new venture.	A3
5	Understand how assess the requirement and sources of finance for the venture	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction: Evolution of Entrepreneurship- Entrepreneur v/s Entrepreneurship, Entrepreneurship and Economic Development, entrepreneurial mindset, Motivation for entrepreneurship, Traits of an entrepreneur, Types of entrepreneurs-Family business and Social Entrepreneurship. Policy support to entrepreneurs-DIC,MSME,EDI, Entrepreneurial Net Works

Unit II (6 sessions)

Structuring the Business Venture: Sources for innovative ideas, environmental scanning, opportunity identification, Incubation of Ideas and Prototype development- Building the Startup Team, benchmarks for effective team, Finding the Mentor, Building the Board of Directors- Formation of the business and Legal aspects of business, acquiring existing business and franchising.

Unit III (6 sessions)

Business Model and Disruptive Innovation: Freemium Business Model – Analytics and Freemium Product Development – Freemium Metrics – Lifetime Customer Value – Freemium Monetization – Virality and Growth. Introduction to Disruptive Innovation. Identifying business processes, Business location strategy, Triggers for starting business, setting-up new ventures, Angel investor,Venture capital entry and exit strategies, institutional support to budding entrepreneurs.

Unit IV (6 sessions)

Business Plan Preparation: Feasibility study -Significance of business plan, Elements of business plan, contents of business plan, production plan, marketing plan, financial plan, Human Resource Plan and organizational structure, developing a business plan.

Unit V (6 sessions)

Business Plan Review: Review of Mobile Application Business plan, Software Company Business Plan, E-commerce Business plan, Online payment system business plan. Success stories –Zomato, Uber, Ola and Oyo rooms.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2

3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Donald F. Kuratko, "Entrepreneurship: Theory, Process, Practice", 9th Edition, Cengage Learning, New Delhi, 2014

Referential text books and journal papers:
Charles E.Bamford ,Garry D.Bruton, "Entrepreneurship a small business approach" ,Tata Mc Grahill,New Delhi,2016.
Robert D Hisrich,M.J.Manimala "Entrepreneurship" Tata Mc Grahill,New Delhi,2016
Poornima M. Charantimath, "Entrepreneurship Development - Small Business Enterprises", Pearson, New Delhi, 2018.
Dr.S.S.Khanka "Entrepreneurship Development ",S.Chand and Comapany Limited,New Delhi,2017.
Arya Kumar, "Entrepreneurship: Creating and Leading an Entrepreneurial Organization" Pearson, New Delhi,Latest Edition.
Freemium Economics Leveraging Analytics and User Segmentation to Drive Revenue, Eric Benjamin Seufert, Elsevier.
Disruption by Design: How to Create Products that Disrupt and then Dominate Markets, Paul Paetz, Apress Publications, 2014.
The Ways to New: 15 Paths to Disruptive Innovation, Jean-Marie Dru, John Wiley and Sons, 2015.
Creative Destruction and the Sharing Economy: Uber as Disruptive Innovation, Henrique Schneider, Edward Elgar Publishing, 2017

Suggested journals:

International Journal of Entrepreneurial Behaviour and Research
International Journal of Small Business Management
International Journal of Entrepreneurship and Innovation Management

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Course Code: MFT718	**Course Title**: Technical & Fundamental Analysis	
Trimester: III	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Valuation of a company is done using two methods, one being Fundamental Analysis and the second being Technical Analysis. Financial Analysts, use fundamental analysis to study the Balance Sheet, Income Statement and Cash Flow Statement to gain insight on a company's future performance. While Technical Analysis mainly focus on stock movement patterns and forecast where the price is likely to move. These two concepts are the backbone for sound financial trading.

LEARNING OBJECTIVES
- To understand how a company is evaluated.
- To understand how to compare company performance using fundamental analysis
- To understand how to predict stock movement based on past historical patterns

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Evaluate performance of companies using fundamental analysis	A1, A2
2	Demonstrate use of charting tools to study the past pattern and predict the stock price movement	A3
3	Analyze and compare stock performance with that of a benchmark and predict the price movement	A3
4	Understand how to use both fundamental and technical analysis to predict price for short, medium and long term perspective	A3

Course outline and indicative content

Unit I (6 sessions)

Factors of Fundamental Analysis, Review of Balance Sheet, Income Statement and Cash Flow.Liquidity Ratios, Cash Conversation Cycle, Solvency Ratios, Profitability Ratios, Du-Pont Analysis, Operating Leverage, Financial Leverage, Common Size Analysis

Unit II (6 sessions)

Introduction to Valuation, Concept of Risk Return, Valuation of Shares, Free Cash Flows, DCF Method, DDM Method, Estimating Cost of Capital, Relative Valuation, Practical

Example of Relative Valuation. Economic Analysis, Industry Analysis and Company Analysis.

Unit III (6 sessions)

Technical Analysis - Pros & Cons, Classical Chart Patterns, Gap Theory, Candlestick Patterns &HeikenAshi, Indicators & Oscillators, Fibonacciseries.

Unit IV (6 sessions)

Trend, Momentum and Patterns, Support and Resistance, Simple Moving Averages, Exponential Moving Averages, MACD, DOW Theory, Elliott Wave Principal, Contrarian and Position Sizing, Head & Shoulder, Point& Figure Charts, Cup & Handle.

Unit V (6 sessions)

Bollinger Bands, Triangle Charts, Aroon Indicators, Trading Mechanism, Practical use of trading software, Set-up Trading Strategies, Money Management Techniques, the Psychology of Successful Traders.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyze cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Jack D. Schwager& Mark Etzkorn, "A Complete Guide to The Future Marke", 2nd Edition, Wiley Trading Series

Referential text books and journal papers:

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Course Code: MOE703	**Course Title**: Online Course-I	
Trimester: III	**Course Type:** Elective/MOOC	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Even while FinTech aims to provide relevant current courses in the curriculum, there would always be student desires to learn something different, which should be encouraged. The aim of providing this credit it to let students pick an online course that is relevant and in-line with their interests, for which they can obtain credits. Students have to discuss and decide the online course to be taken in consultation with their coordinator. Upon completing the formal requirement of the course and obtaining a certificate, it can be produced to obtain credits for this course.

LEARNING OBJECTIVES
- To be flexible and let students pursue their creative interests in other fields.
- To gain insights and understand the nuances of other relevant and current curriculum.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demonstrate learning from the online course chosen.	A3
2	Would be able to pursue their passion.	A3
3	Debate and justify their views when challenged about a methodology.	A3

Course outline and indicative content

This is an individual online course, that the students have to take from NSE, Coursera, CISI etc, after seeking approval from the assigned mentor/guide. Under guidance of a faculty students have to complete the course that they have taken by submitting the certificate obtained from the course. During the viva students will be interviewed by a panel on the learning from the online course.

Assessment methods

Task	**Task type**	**Task mode**	**Weightage (%)**
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To consult on a weekly or fortnightly basis with the assigned guide to discuss progress and seek advice on direction/approach from the guide

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Course Code: MFT714	**Course Title**: Project-I	
Trimester: III	**Course Type:** Elective	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Individual projects are meant to apply the learning from the prior courses, itcheck ones knowledge and completeness on a topics which are of interest. The aim is to develop articulation skills, which makes the students more rounded and builds confidence. Topics can vary from the subjects taught to general knowledge and current trends in the industry and country. This ensures that the student gains holistic knowledge. Students can pick any project that is current and if possible that will add value to the industry.

LEARNING OBJECTIVES
- To enhance knowledge, by learning about the current issues.
- To apply learnings into a project that will add value for the industry
- To learn how develop a concise and coherent project report.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demonstrate thoroughness on the project subject	A3
2	Articulate their thought process, through a presentation	A3
3	Debate and justify their views when challenged about a methodology.	A3

Course outline and indicative content

This is an individual/group depending on the complexity of the project, that the students have to decide. A project proposal is submitted within a week of the start of the trimester on what the project is likely to be. Under guidance of a faculty students have to complete the project, submit a report and present their projects to the rest of the team. Such projects is a basis of applying the learning coherently to a real world problem and resolving it. Depending on the data requirement students are expected to go out into the community to collate the data for analysis. During the presentation students will be interviewed by a panel. Even though this project is course in Trimester-II, the report along with presentation to the panel is expected at the end of Trimester-III, giving enough time to make this a well-managed project with exceptional output and learning.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To consult on a weekly or fortnightly basis with the assigned guide to discuss progress and seek advice on direction/approach from the guide

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Course Code: MFT793	**Course Title**: Viva-I	
Trimester: III	**Course Type:** Presentation/Oral	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Viva is the verbal process to check ones knowledge and completeness on a topics which are of interest. The aim is to develop articulation skills, which makes the students more rounded and builds confidence. Topics can vary from the subjects taught to general knowledge and current trends in the industry and country. This ensures that the student gains holistic knowledge.

LEARNING OBJECTIVES
- To ensure that students enhancing their general knowledge.
- To develop inter-personal communication skills during interacting with.
- To learn how develop a concise and coherent project report.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Improve their confidence on the subject.	A3
2	Articulate their thought process, improve communication.	A3
3	Debate and justify their views when challenged about a methodology.	A3

Course outline and indicative content

This is the end of the year Viva, where a panel will be interviewing the students. This viva will test students understanding of the knowledge gained, the projects done, the industrial tours taken and check their assimilation and application of this knowledge.

Assessment methods

Task	**Task type**	**Task mode**	**Weightage (%)**
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To come prepared based on the past course, current market trends, global economic growth etc. Should be ready to debate and express viewpoints to assess synthesis of knowledge.

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Trimester-IV Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT813	HR	Human Resource Management	3		3	40	60	100	3
2	MFT816	Technology	Hadoop	3	1	4	40	60#	100	3
3	MFT807	Analytics	Business Analytics	3		3	40	60	100	3
4	MFT819	Technology	Cryptography & Cyber Security	3		3	40	60	100	3
5	MFT891	Management	Internship	3		3		100	100	3
			Totals:	15	1	16	160	280	500	15

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

Course Code: MFT813	**Course Title**: Human Resource Management	
Trimester: IV	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Human resource is being considered as the core of organisations which creates value and competitive advantage. In the world of innovations, it is very essential for leaders to focus on building superior workforce and meet the needs of the present as well as develop talent for the future generations. In this emerging global economic environment, even companies which operate in domestic markets have to contend with global competition. Managing people in a global context is thus the essence of international human resource management. The world is also on the threshold of most exciting and promising phase of the evolution of human resources and human capital management. Today there is a shift of the attention towards predictability. The course is designed to study about the foundations of human resource management in a domestic environment as well as an international scenario. It is also designed to equip the students with understanding the strategic role of human resource management and also predictive management i.e., managing today and tomorrow.

LEARNING OBJECTIVES
- To understand the people management aspects in organizations
- To develop sustainability and business efficiency through developing people
- To know how to predict and make people related decisions for the efficiency of organizations.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Develop people management skills for the higher performance of organizations	A1, A2
2	Make human resource decisions in the global context	A3
3	Predict and make decisions for the future using big data	A3

Course outline and indicative content

Unit I (6 sessions)

Foundations of HRM: Evolution of HRM, Importance of HRM, Role of HR Manager, Challenges and Future of Workforce, HR Practices- Recruitment, Selection, training and

development, compensation, Safety and health, managing labor relations, emerging trends – HR Accounting, HR audit, HR analytics.

Unit II (6 sessions)

Building Superior Workforce: Competency development, Performance management System, Leading High performance teams, Integrated Performance Management, Maturity Alignment; Succession Planning and Career Planning. **Case**.

Unit III (6 sessions)

Aligning HR with Strategy: Theories of strategic management of Human resources, Linking HR processes to Strategy, HR strategy differentiation, Effective HRM strategy.**Case**

Unit IV (6 sessions)

International Human Resource Management: Approaches to international HRM, Staffing, training, Compensation, Performance management and Industrial relations in global context.

Unit V (6 sessions)

People Analytics: Meaning, classification of analytics, Importance of Human Capital Management, capability planning, building scenarios and creating the playbook, performance evaluation, Retaining employees, Employee engagement and disengagement, Signs of departure, Predictive Analytics for Human Capital Management. **Case**.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Gary Dessler& Biju Varkkey, "Human Resource Management", Pearson, New Delhi, 2013.

*Referential text books and journal papers***:**
Edwin B Flippo, "Personnel Management", Tata McGraw Hill Publishing Co., New Delhi, 1984.
Lance A Berger & Dorothy R Berger, "The Talent Management Handbook", Mc Graw Hill Education, Indian Edition.
Monica Belcount, Kenneth Mc Bey, Ying Hong, "Strategic HR Planning", Management Yap.
Peter J Dowling and Denice E Welch, "International Human Resource Management", Thomson India, 2006.
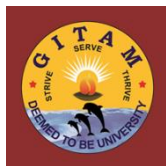JAC Fitzeng: The New HR Analytics

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Course Code: MFT816	**Course Title**: Hadoop	
Trimester: IV	**Course Type:** Theory/Lab	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Big data is growing bigger every day and it could just be garbage, if we do not understand how to harness the power of this data. Hence Big Data analytics is the skill-set required by most organizations who deal with some form of data. Hadoop establishes the framework of how such big data can be analyzed. Hadoop is an open-source framework that allows to process big data in a distributed environment across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage.

- To understand computer server architecture
- To understand the Hadoop distributed environment
- To understand how MapReduce architecture works.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demonstrate setting up of a distributed cluster of computers	A1
2	Demonstrate distribution of data using MapReduce	A3
3	Understand the configuration of HDFS.	A2
4	Will be able to work on pig	A3
5	Will be able to model using mahout	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to big data and Hadoop, Hadoop Architecture, Hadoop Versioning and Configuration, Basic Linux commands

Unit II (6 sessions)

Single Node Hadoop installation on Ubuntu, Hadoop commands, Modes in Hadoop, Local, Pseudo Distributed &Fully Distributed Mode

Unit III (6 sessions)
Hadoop Daemons: Master Daemons Slave Daemons, Accessing HDFS, Understanding YARN, MapReduce examples.

Unit IV (6 sessions)
Introduction to Hadoop pig: Pig Architecture, Pig Installation, Pig Grunt shell, Introduction to Pig Latin, Reading and storing data using Pig.

Unit V (6 sessions)
Introduction to Hadoop Mahout: Mahout Installation, Mahout Recommender Engine, Mahout Clustering, Mahout Classification. Project in Hadoop

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master
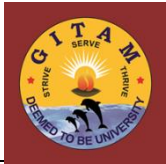
certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**

1. An Introduction to Hadoop: Tutorial – Open Source

*Prescribed Reference books***:**

1. Hadoop: The Definitive Guide, Tom White 4th edition, Oreilly publications

Course Code: MFT807	**Course Title**: Business Analytics	
Trimester: IV	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Business Analytics provides a set of statistical tools that can be used to analyze data to help with business decision making. Data is the biggest asset for any corporation, which if effectively leveraged can build competitive advantage. This course aims to introduce students to the methodology that needs to be followed and tools that can be used for data analysis.

LEARNING OBJECTIVES
- To understand the basic data analytic measures
- To provide exposure to data visualization tools
- To understand optimization models that helps with decision analysis.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Perform linear and multiple regression models	A1, A2
2	Visualize data using charting tools	A3
3	Demonstrate use of simulations for decision analysis.	A3
4	Analyze online timeseries datasets and build models to build MIS dashboards	A3

Course outline and indicative content

Unit I (6 sessions)

Descriptive, Predictive and Prescriptive Analytics, Data types, Categorical Data, Cross-section and Time series data.

Unit II (6 sessions)

Data analysis using Excel, Data Distributions, Measures of location, variability, Covariance and Correlation Coefficients.Data Visualizations, Tables, Charts, GIS Charts, Data Dashboards.

Unit III (6 sessions)

Linear and Multiple Regression Models, Inference, Modelling nonlinear relationships, Model fitting, using XLMiner or Python.

Unit IV (6 sessions)

Linear Optimization Models, Non-Linear Optimization Models, Integer-Liner Optimization Models.

Unit V (6 sessions)

Monte-Carlo Simulation, Decision Analysis.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Jeffrey D. Camm, Cochran, et.al, Essentials of Business Analytics, 2015, Cengage Learning.
Referential text books and journal papers:
Sahit Raj, Business Analytics, 2015 Cengage Learning.

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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GITAM FinTech Academy
GITAM Institute of Management

Course Code: MFT819	Course Title: Cryptography & Cyber Security	
Trimester: IV	Course Type: Theory	Credits: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

The growth of internet has also seen the growth of hacking. Cryptography is the process of encoding and decoding a transmission message to ensure it is not tampered with. This course is aimed at introducing students to the tools that are available to ensure the messages are transmitted safely using public and private keys.
- To introduce to crypto key fundamentals
- To understand message authentication and integrity checks.
- To understand the public and private key ciphers.

On successful completion of this course, students will be able to:

	Learning Outcome	Assessment
1	Generate public and private keys	A1
2	Analyze and check authentication of the message	A3
3	Check and validate a digital signature.	A2
4	Demonstrate ability to identify Security Vulnerabilities	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to cryptography, Security services; Symmetric key cipher, Traditional symmetric-key ciphers, substitution cipher, transportation cipher, Data Encryption Standard (DES) structure and analysis

Unit II (6 sessions)

Advanced Encryption Standards (AES), key and analysis of AES ciphers, Block Ciphers, RSA cryptosystem, Diffie-Hellman key exchange, Elliptic Curve Cryptosystems.

Unit III (6 sessions)
Hash functions, SHA-512, Digital signature, Digital Signature Standards (DSS), Elgamal Digital Signature schemes. Security at application layer: E-Mail, PGP, S/MIME, Security at Transport Layer, SSL Architecture, SSL Message formats, Handshake protocol. Security at Network layer, IPsec, Authentication header (AH), ESP, IPv6

Unit IV (6 sessions)
Introduction to Cyber Security: Overview of Cyber Security, Internet Governance – Challenges and Constraints, Cyber Threats:- Cyber Warfare-Cyber Crime-Cyber terrorism-Cyber Espionage, Need for a Comprehensive Cyber Security Policy, Need for a Nodal Authority, Need for an International convention on Cyberspace.

Unit V (6 sessions)
Cyber Security Vulnerabilities and Cyber Security Safeguards: Cyber Security Vulnerabilities-Overview, vulnerabilities in software, System administration, Complex Network Architectures, Open Access to Organizational Data, Weak Authentication, Unprotected Broadband communications, Poor Cyber Security Awareness. Cyber Security Safeguards- Overview, Access control, Audit, Authentication, Biometrics, Cryptography, Deception, Denial of Service Filters, Ethical Hacking, Firewalls, Intrusion Detection Systems, Response, Scanning, Security policy, Threat Management.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
1. William Stallings, Cryptography and Network Security, 3rd Edition, Pearson
2. Cyber Law and Cyber Security in developing and emerging Economics by Zeinab Karake Shalboub, Lubna Al Qusinie

*Prescribed Reference books***:**
1. Cryptography & Network Security, 2nd Edition by Forouzan, McGraw-Hill
2. CYBER SECURITY ESSENTIALS by James Graham, Richard Howard, Ryan Olson

Course Code: MFT891	**Course Title**: Internship	
Trimester: IV	**Course Type:** External Practical	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Internship is one of the on-the-job training methods before employment to acquire and impart practical skills and knowledge to the students. An internship is an opportunity for a student to gain practical experience in a real world setting under the guidance of a knowledgeable, experienced, and successful supervisor. The internship can be established in any setting in which information is gathered, stored, managed, retrieved, and disseminated.

Internships provides students an opportunity to gain experience in their field, determine if they have an interest in a particular career, create a network of contacts and gain university credit. Some interns find permanent, paid employment with the companies in which they interned. Their value to the company may be increased by the fact that they need little to no training.

LEARNING OBJECTIVES

- To provide a platform where students can gain practical exposure of a corporate environment and systems.
- To provide hands-on-experience to students and provide exposure to practical aspects in various functional areas;
- To manage expectations and groom students for the responsibilities and challenges of the corporate world.
- To provide a recruitment pipeline to prospective employers, if they find the intern's performance during the internship to their satisfaction.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand the workings of the business in which they have interned.	A3
2	Improve inter-personal communication skills.	A3
3	Decide if the field in which they are working, is an area they plan to build a career.	A3
4	Understand the expectation of the real corporate world.	A3

Course outline and indicative content

The internship is for a duration of 6 to 8 weeks during the summer break after the first three trimesters. Students are required to identify the company that they plan to intern in, else one will be recommended and provided by the institute. They are required to complete the internship and obtain a certificate. They are required to submit an internship report and present their learning during the next viva.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To come prepared based on the past course, current market trends, global economic growth etc. Should be ready to debate and express viewpoints to assess synthesis of knowledge.
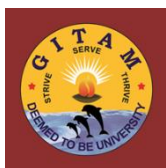
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Trimester-V Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT802	Finance	Banking, Mortgage & Insurance	3		3	40	60	100	3
2	MFT817	Technology	Blockchain	4	1	5	40	60#	100	4
3	MFT808	Marketing	Digital Marketing	3		3	40	60	100	3
4	MFT814	Finance	Mergers, Acquisition & Intl Finance	3		3	40	60	100	3
5	MFA802	Management	Cyber Laws	3		3	40	60	100	3
			Totals:	16	1	17	200	240	500	16

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment
#: 40 marks for external and 20 marks for practical

Course Code: MFT802	**Course Title**: Banking, Mortgage & Insurance	
Trimester: V	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Over the last three decades there has been a remarkable increase in the size, spread and scope of banking activities in India. The emergence of new private banks with enhanced technology has broadened the scope and range of banking services offered to consumers. A peek into the basic tools of banking, along with the regulations governing the sector is beneficial to those interested in taking banking as a profession.

Mortgages is the process of raising funds to finance the purchase or remortgage a property. As every citizen dream to own a house, this industry is constantly growing while gyrating to the market forces. Insurance is a risk mitigating tool that is prevalent in every walk of life, from health, general, business insurance to life insurance. The policies that govern the issuance and claims of an insurance is an important areas, which is currently still in its nascent stage in India.

LEARNING OBJECTIVES

- To understand the principles of mortgage and the amortization techniques.
- To understand the type of insurance products.
- To understand the various products offered by the insurance companies and its operations.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand how to price a mortgage and calculate the annuity	A1, A2
2	Assess documentation requirement for life or general insurance	A3
3	Would be able to price an insurance product	A3
4	Analyze hazards and perils while pricing insurance premiums	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to Retail Banking, customers, products, services; New Products & Services – Financial Planning and Advisory Services, Banc assurance. Interbank Transfer - Electronic

Clearing Services (ECS), Electronic Funds Transfer – NEFT, RTGS, SWIFT, Electronic cheques; Safe Deposit Lockers; FOREX service; DEMAT and Custodial service. Retail Lending: Cash Credit, retail loans – vehicle, personal, home, education; Creation of Security – hypothecation, mortgage, pledge, lien; Banker's Rights; management of non-performing assets (NPA). Payments & Settlements: NPCI, IMPS, UPI, Mobile Wallet.

Unit II (6 sessions)

Overview of the Laws Affecting Residential Mortgage Loans, Ethics in Mortgage Lending. Fixed rate, Hybrid, Adjustable rate, reverse mortgages, Mortgage qualification ratios, Credit scores and underwriting, Residual Method of qualification, Qualified Mortgages.

Unit III (6 sessions)

Annuity, Amortization, Constant Amortization Mortgage (CAM), Constant Payment Mortgage (CPM), Adjustable Rate Mortgage (ARM), Mortgage Yields, Prepayments, Refinancing Decision. Working Capital, Insolvency Regime

Unit IV (6 sessions)

Insurance fundamentals, Business insurance, Property and liability insurance, Automobile insurance, Life insurance, Rights and Responsibilities of insurance. Characteristics of Insurance, requirements of an insurable risk, types of insurance business, insurance as contract, essential elements, fundamental principles of insurance, insurance documents. Types of Life insurance, principles of Life Insurance, policy options, condition & privilege, nomination, assignment, product pricing. Types of General Insurance, principles of General Insurance, laws related to General Insurance, rating making in General insurance. Group Insurance.

Unit V (6 sessions)

Nature of Reinsurance, Analysis of Factors that influence results, functions of reinsurance, advantages of reinsurance, areas of the application of reinsurance, forms of reinsurance. Diversification of risk, Systemic Risk, Insurance Pricing, Risk Management, reinsurance, Group Insurance. Risk Identification, Chances of loss, peril and hazard, classification of risk, types of pure risk, burden to the society, methods of handling risk, Risk Management.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2

2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**

George E. Rejda, "Principles of Risk Management & Insurance", Pearson, New Delhi, 2014.

*Referential text books and journal papers***:**

Scott Harington, "Risk Mgmt& Insurance", Tata McGraw-Hill Education, New Delhi, 2014
Richard Jones, "Risk Based Management", Gulf Pub, 2014
Rakesh Agarwal, "General Insurance Agents", K. M. Rai Mittak for Mittal Publications, 2013
Padmalatha Suresh & Justin Paul, Management of Banking and Financial Services, 5th impression, Dorling Kindersley (India) Pvt. Ltd., licensees of Pearson, New Delhi, 2014.

Suggested journals:

Journal of Insurance and Risk Management, BIMTech, New Delhi
Indian Journal of Risk management, Institute of Management, Nirma University of Science and Technology, Ahmedabad
GITAM Journal of Management, GITAM Institute of Management, GITAM University, Visakhapatnam
Indian Journal of Public Enterprise, Institute of Public Enterprise Research

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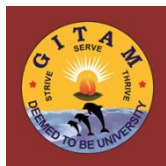
GITAM FinTech Academy
GITAM Institute of Management

Course Code: MFT817	**Course Title**: Blockchain	
Trimester: V	**Course Type:** Theory/Lab	**Credits**: 4
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Satoshi Nakamoto is the ingenious brainchild behind the technology. It came into prominence with the invention of Bitcoin the digital crypto currency, built on Blockchain platform. This technology platform is smartly adapted by various industry verticals, to make information distributed in a secure system. One of the biggest fears with digital transformation is the risk of hacking, which can be totally eliminated with Blockchain technology, as the data is self-audited using the Distributed Ledger Technology (DLT). This course aims to introduce students to Blockchain, DLT, Bitcoin, Ethereum and Hyperledger.

- To understand the Blockchain framework.
- To understand how Distributed Ledger Technology works.
- To understand Ethereum and Hyperledger, two Blockchain framework applications

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Build hash and key functions.	A1
2	Understand the requirement for DLT.	A3
3	Understand smart contracts and Bitcoins.	A2
4	Demonstrate ability to Build DApps	A3

Course outline and indicative content

Unit I (6 sessions)
Introduction, history of Bitcoin and origins of Blockchain, Fundamentals of Blockchain and key components, Permission and Permission-less platforms, Cryptography, SHA256 and ECDSA, Hashing and Encryption, Symmetric/ Asymmetric keys, Private and Public Keys

Unit II (6 sessions)
Distributed Ledger Technology (DLT): Peer to Peer computing, Keys and Hash functions

Unit III (6 sessions)
Bitcoin: Bitcoin overview, Building blocks of Bitcoin, Bitcoin – Wallets, Bitcoin – POW Consensus & mining, Bitcoin - Scripts
Unit IV (6 sessions)
Ethereum: Smart Contracts, Ethereum Wallets, Tools – Mist, Web3, DappS

Unit V (6 sessions)

Hyperledger: Introduction to Hyperledger, Projects, Architecture components and how it works, REST API and HFC

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
1 Blockchain: Blueprint for a New Economy, Melanie Swan O'Reilly Publications

Course Code: MFT808	**Course Title**: Digital Marketing	
Trimester: V	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Digital Marketing is the process of promoting brands and products using electronic media. Digital marketing has grown significantly over the past years, as businesses realized the power of accessibility to wider audience using the electronic media. This course aims to introduce students to the tools available to promote and check the effectiveness of digital marketing.

LEARNING OBJECTIVES

- To learn how to develop an effective e-commerce website
- To identify various strategies to improve search-engine rankings
- To exploit the reach of social media and social networks for marketing campaign.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand how digital marketing and marketing analytics work in assessing the effectiveness of a campaign	A1, A2
2	Assess the effectiveness of a social media campaign	A3
3	Demonstrate ability to design and implement social media campaign	A3
4	Develop and implement various types of advertisement campaign	A3

Course outline and indicative content

Unit I (6 sessions)

Search Engine Optimization (SEO), Listing of website, optimizing search, result analysis.

Unit II (6 sessions)

Search Engine Marketing (SEM), pay-per-click, running ads on search engines.

Unit III (6 sessions)

Web analytics, campaign statistics, measure, monitor and evaluate website traffic, metrics for business decisions. E-mail marketing, Integrating offline and online databases.

Unit IV (6 sessions)

Social Media Marketing (SMM), Building brand preferences, generating leads and harnessing strength for marketing. Advertising on Social Networking Sites YouTube and video advertising.

Unit V (6 sessions)

Mobile Marketing, App-based marketing, QR Codes, SMS, Location-based. Content and Blog Marketing (CBM).

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
Puneet Singh Bhatia, "Fundamentals of Digital Marketing", Pearson.
*Referential text books and journal papers***:**

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFT814	**Course Title**: Mergers, Acquisitions & International Finance	
Trimester: V	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Any organization that intends to grow inorganically, goes through the process of Merger or Acquisition. The success of the M&A activity is very critical on the merits and adaptation to the new working culture. If the M&A is with an international organizations, it adds to the complexity. This course aims to highlight the different styles of M&A and the methodology to be followed. It also lays the foundation for international corporate finance.

LEARNING OBJECTIVES
- To understand the strategies behind M&A.
- To understand the defensive tactics
- To understand the process of valuing intangibles.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand estimation and payment methods for an M&A	A1, A2
2	Analyze the impact of exchange rate on international funds flow	A3
3	Analyze the foreign exchange risk exposure for a business	A3
4	Demonstrate ability to strategize for acquisition or defending a company from takeover	A3

Course outline and indicative content

Unit I (6 sessions)

Causes of M&A, Strategic Approaches to M&A, Motives & Synergies, Takeover and defense tactics.

Unit II (6 sessions)

Corporate Valuations: Concepts & Principles, Techniques and Structuring swap ratio. Asset based, Yield Based, Dividend Based, P/E based valuations.

Unit III (6 sessions)

Valuing the intangibles: Brands, Goodwill, Human Resources and Cust Relationships. Methods of payment for M&A, Leveraged Buyout, Legal Aspects, Integration in M&A.

Unit IV (6 sessions)

International Financial Environment, Flow of funds, Exchange rate determination, International arbitrage and interest rate parity, relationship between inflation, interest rate and exchange rate. International bonds such as T-Bill, Euro Dollar, TED Spread, Masala Bonds.

Unit V (6 sessions)

Direct foreign investment, Financing international trade, Country risk analysis, International cash management. Foreign Exchange borrowing options, funding avenues in global corporate markets, international equity financing, introduction to ADRs, GDRs.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**

Jeff Madura, "International Corporate Finance", 10th Edition, Cengage, New Delhi, 2012
Kamal Ghosh Ray, "Mergers and Acquisitions, Strategy, Valuations and Integration", PHI.
Referential text books and journal papers:

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Course Code: MFA802	**Course Title**: Cyber Laws	
Trimester: V	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Internet has significantly changed the lives of many individuals. Starting with a simple e-mail it has penetrated and has added value to individuals and businesses. Consumers are lapping up this new technology and are asking for more. With online businesses like travel, shopping, social networks etc, exploding, the laws of brick-and-mortar business cannot be directly applied for online shopping. Growth of online business comes with some caveats like identity theft, hacking etc. These need to be governed with special laws, called the cyber laws. This course aims to highlight the issues with online business and how to legally maneuver using cyber laws.

LEARNING OBJECTIVES
- To make students familiar with the national and international aspects of Cyber Law
- To distinguish between cybercrimes and traditional crimes.
- To introduce cyber laws as governed by the Information Technology Act 2000.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand the legal framework that governs online businesses.	A1, A2
2	Understand the protections to consumers, in case they are victims of identity theft etc.	A3
3	Analyze laws governing trade secrets, cybercrime etc.	A3
4	Develop strategies to protect a company from any Cyber threats	A3

Course outline and indicative content

Unit I (6 sessions)

Conceptual and theoretical perspective of Cyber Law, Computer and Web Technology, Development of Cyber Law, National and International Perspective Cyber Law, Legal issues and challenges in India, USA, Data Protection, Cyber Security.

Unit II (6 sessions)

Jurisdiction issues in Transactional Crimes Cyber Law, International Perspective, Budapest Convention on Cybercrime. Hacking and Legal Issues, Privacy legal issues.

Unit III (6 sessions)

Cyber Law and IPR, Understanding Copyright in Information Technology, Software Copyrights Copyright in Internet & Multimedia, Software Piracy, Trademarks in Internet Domain Name registration, Domain Name disputes, Icann's core principles and domain names, Net Neutrality, Databases in IT, Protection of databases, Position in USA, EU and India.

Unit IV (6 sessions)

E-Commerce, UNCITRAL Model, Legal Aspects of E-Commerce, E-Taxation, E-Banking, Online Publishing and online credit card payment, Employment Contracts, Non-Disclosure Agreements.

Unit V (6 sessions)

Information Technology Act 2000, Aims and Objectives, Overview of the Act, Jurisdiction, Electronic Governance, Electronic Evidence, Digital Signature Certificates, Digital Signatures, Duties of Subscribers, Role of Certifying Authorities, Regulations Appellate Tribunal, Internet Service Providers and their liabilities, Social Networking Sites.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Kamath Nandan, Law Relating to Computer, Internet and E-Commerce.

Referential text books and journal papers:
Yatindra Singh, Cyber Laws
Gerald R. Ferrera, Reder et.al, CyberLaw Text & Cases, 3rd Edition, Cengage Learning
Faroug Ahmed, Cyber Law in India
Vakul Sharma, Hand book of Cyber Laws

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
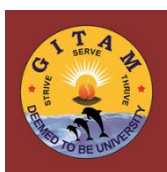Harvard Business Review, Harvard Business School Publishing Co. USA

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Trimester-VI Courses

Sl. No.	Course Code	Course Type	Courses	Sessions			Marks			Credits
				T	P	Tot	CA	TEE	Tot	
1	MFT806	Management	Design Thinking	3		3	100		100	3
2	MFT809	Finance	Security Analysis & Port Mgmt	3		3	40	60	100	3
3	MFT818	Management	Corporate Governance, Compliance & Ethics	3		3	40	60	100	3
4	MFA803	Technology	Cloud Computing	3		3	40	60	100	3
5	MOE809 *	MOOC	Online Course-II	3		3	40	60	100	3
6	MFT892	FinTech	Project-II	3		3	40	60	100	3
7	MFT893	Management	Viva-II	3		3	100		100	3
			Totals:	21	0	21	400	300	700	21

Key: T = Theory, P= Practical, TEE – Term End Evaluation, CA – Continuous Assessment

* MOE: Is open elective course, only for PGD(FinTech) & MBA(FinTech)

#: 40 marks for external and 20 marks for practical

Course Code: MFT806	**Course Title**: Design Thinking
Trimester: VI	**Course Type:** Theory Internal **Credits**: 3
Home Programme(s): MBA(FinTech)	
Course Leader:	

Course description and learning outcomes

Design Thinking, is an all-inclusive approach to problem solving, which is customer centric. Deep understanding is the cornerstone of design thinking, which is obtained through observation, shadowing and experimenting with ideas. Design thinking is more prevalent in product design, but is being applied to process improvements, business models, management and strategy. This course aims to provide students exposure to the process of deep learning and design thinking.

LEARNING OBJECTIVES
- To provide exposure to the design thinking process
- To let students ideate on a design process
- To critically develop point of view and problem framing.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	To empathize, define, ideate, prototype and test a concept.	A1, A2
2	Obtain a deep understanding of a concept from a customer centric perspective.	A3
3	Demonstrate ability to prototype concepts to obtain richer final results	A3
4	Develop a product prototype that will help the community	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to Design Thinking, Empathize, Innovation Process, Characteristics of successful innovation.

Unit II (6 sessions)

Human centered design, Define, Point of View statements.

Unit III (6 sessions)

Problem framing, Identify problem frames, Deep Customer Understanding, Identify areas of opportunity.

Unit IV (6 sessions)

Ideate, Idea Generation, Nominal Group Technique, Round Robin, Creative Matrix, Systematic Inventive Thinking.

Unit V (6 sessions)

Prototyping, Concept Development, Cost of early prototype failure, Implementation and testing.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

*Prescribed text book***:**
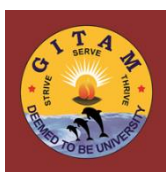
*Referential text books and journal papers***:**

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Course Code: MFT809	**Course Title**: Security Analysis & Portfolio Management	
Trimester: VI	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Since the financial deregulations in 1991, Indian economy has grown significantly and businesses have learnt and tapped the other sources of capital, than just bank loans. These days, organisations have a separate wing that deals with treasuries and capital to help hedge their risk exposure, be it from foreign exchange or interest rate fluctuations. Understanding the basic tools required to perform valuations of stocks, assessing risk by using fundamental and technical analysis, can assist one to manage a firm's financials more efficiently.

LEARNING OBJECTIVES
- To understand the basic concepts of Security Analysis, by calculating returns and risk.
- To understand the basic concepts of Portfolio Analysis and the concepts of Mutual Fund portfolio management
- To calculate the risk exposure and how to reduce risk in a given portfolio.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Analyze valuations of companies	A1, A2
2	Build a portfolio and assess its risk.	A3
3	Build a portfolio that minimizes risk at maximize returns.	A3
4	Understand how to pick stocks using their past performance by comparing historical timeseries data.	A3

Course outline and indicative content

Unit I (6 sessions)

Introduction to Security Analysis and Portfolio Management: Features of Investment – Investment Vs Speculation Vs Gambling - Risk definition and measurement; Stock Return and Valuation. Bonds – Valuation, Risks associated with bond investments, Calculation of YTM.

Unit II (6 sessions)

Portfolio Construction and selection: Markowitz model and efficient frontier, Sharpe Index model, Construction of Optimal portfolio.

Unit III (6 sessions)

Performance Evaluation of Portfolios: Need for Evaluation - Evaluation using Sharpe, Treynor and Jensen Index.

Unit IV (6 sessions)

Market Index Portfolio, Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT), Fama's Three Factor Model and Carhart's Four Factor Model, Portfolio Attributes Analysis.

Unit V (6 sessions)

Mutual Fund Management: Structure, Types, Policies, Costs associated with funds, Asset Composition, Fund of Funds. Fund Return Measurement: Holding Period Return, Value Weighted Return, Time Weighted Return, NAV, Tracking Error.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analysecases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:

Ranganatham, M., and Madhumathi, R., "Investment Analysis & Portfolio Management", Pearson, New Delhi, 2012.

Referential text books and journal papers:

V.K. Bhalla, "Investment Management", S.Chand& Company Pvt. Ltd., New Delhi, 2014
Fisher & Jordon, "Security Analysis and Portfolio Management", Tata Mc-Graw Hill, Delhi, 2008
Edwin J Elton, Martin J Gruber, Stephen J Brown & William N Goetzmann, "Modern Portfolio Theory and Investment Analysis", Wiley , New Delhi, 2014

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Course Code: MFT818	**Course Title**: Corporate Governance, Compliance & Ethics	
Trimester: VI	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Risk management is a methodology followed for identifying and measuring risks and developing strategies to mitigate them, with an aim to ensure successful risk reduction. With the Financial markets meltdown in the past, regulators are closely monitoring the adherence to regulations and penalties for non-compliance is high, not just from a cost perspective but also from a brand reputation perspective. Ethics and responsibility in Management has received critical focus in the wake of the recent financial crisis rocking the global economy. It is believed by many that in the own interest of business, importance be given to ethical functioning. Business decisions often concern complicated situations that are neither totally ethical nor totally unethical. The need for imparting sound ethics and a responsible mindset in the future leaders is considered as one of the important aspects of Management education. This course aims to introduce students to the framework of risk and compliance that is prevalent in the financial industry along with Ethics, which is the cornerstone of any sustainable company.

LEARNING OBJECTIVES
- To be able to identify the capital adequacy ratio under the Basel accord.
- To understand the KYC process
- To understand AML process and regulatory requirements.
- To provides students a contextual understanding of ethical/unethical issues in business
- To stimulate thinking on ethical issues, and professional challenges encountered in business

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Analyze documentation requirement for KYC	A1, A2
2	Would be able to identify AML process, identify questionable funds and the regulatory reporting requirements	A3
3	Assess and synthesize value system and its importance	A3
4	Take decisions in personal and professional life, with a clear understanding about the ethical implications on individual, firm and the society at large	A3

Course outline and indicative content

Unit I (6 sessions)

Compliance culture: Why it is important, and how to communicate the obligations. Policies, Workplace Ethics, the code of conduct, Privacy and information security. Handling confidential information. Conflicts of interest. Use of organizational property. Fair dealings with customers, vendors and competitors. Reporting ethical concerns. Creating an ethical Organization; Factors influencing the ethical culture - Leadership, business environment, Code of Ethics; Corporate Values vs Personal values.

Unit II (6 sessions)

Ethics: Personal, Professional; Formation; moral overconfidence; moral disengagement; Business ethics – Importance, need and Significance; Stakeholder theory; Globalization and business ethics. Ethical dilemmas – Sources & their resolutions; Influencing factors; Cross-holder conflicts and competition; Case Studies.

Unit III (6 sessions)

BASEL II / BASEL III, New capital adequacy framework replaces the 1988 Accord, Credit Risk-3 approaches, Stress testing and Basel.The Sarbanes Oxley Act of 2002. The Need for US federal legislation: Financial reporting, Corporate governance.

Unit IV (6 sessions)

Loss Distribution, Standard Normal Distribution, "Fat Tails" in the normal distribution, Expected loss (EL), Unexpected Loss (UL), Value-at Risk (VaR), Calculating Value-at Risk, Stress Testing, All Greek value calculations.

Unit V (6 sessions)

Anti-Money Laundering, What is Money Laundering? Three Stages in the Money Laundering Cycle, The Economic and Social Consequences of Money Laundering, Methods of Money Laundering, Money Laundering Risks Associated with New Technologies, 4 Key Elements of KYC, Due-diligence and reporting of suspicious activities.HR Issues - Discrimination; harassment; working conditions - HSE, privacy, work-life balance; whistle blowing - ethical or unethical; Marketing – unethical issues in pricing and advertising

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2

3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via X-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the X-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Fernando, A. C., "Business Ethics", 7th Ed., Pearson, New Delhi, 2014.

Referential text books and journal papers:
Manikutty, S., "Being Ethical – Ethics as the foundation of Business", Random House
India, Noida, 2011
Crane & Matten; "Business Ethics", Oxford Press, New Delhi
Barsky, A., Investigating the Effects of Moral Disengagement and Participation in Unethical
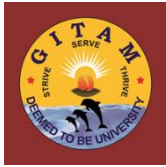Work Behaviour, Journal of Business Ethics, June 2011, Vol. 104, pp 59-75

Suggested journals:

Vikalpa, Indian Institute of Management, Ahmedabad
Journal of General Management, Mercury House Business Publications, Limited
Harvard Business Review, Harvard Business School Publishing Co. USA

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Course Code: MFA803	**Course Title**: Cloud Computing	
Trimester: VI	**Course Type:** Theory	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Cloud computing makes the computer system resources, especially storage and computing power, available on demand without direct active management by the user. The term is generally used to describe data centers available to many users over the Internet. Large clouds, predominant today, often have functions distributed over multiple locations from central servers. If the connection to the user is relatively close, it may be designated an Edge server.

- To understand the basic of Cloud computing.
- To understand the different services in cloud computing
- To understand the AWS storage
- To understand the automation and AWS deployment tools

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Understand how to Design, develop and deploy cloud based solutions using AWS	A1
2	Understand how to plot from R, based on analytics.	A3
3	Demonstrate ability to Develop and maintain applications for Amazon Simple Storage Services.	A2
4	Analyze RESTful API interfaces	A3
5	Demonstrate ability to work on Kubernetes	A3

Unit I (6 sessions)

Understanding Cloud Computing: Cloud origins and influences, basic concepts and terminology, goals and benefits, risks and challenges.
Fundamental Concepts and Models: Roles and boundaries, cloud characteristics, cloud delivery models, cloud deployment models

Unit II (6 sessions)
Cloud Enabling Technology: Data center technology, virtualization technology, web technology, multitenant technology, service technology.
Cloud Infrastructure Mechanisms: Logical network perimeter, virtual server, cloud storage device, cloud usage monitor, resource replication.

Unit III (6 sessions)

Introduction to Amazon Web Services: AWS Cloud concepts, AWS Cloud architectural, AWS services

Introduction to AWS Identity and Access Management: IAM Essentials, Policies, Users, Groups,

Roles, Security Token Services, API Keys and AWS Key Management Service (KMS)

AWS Elastic Compute Cloud: EC2 Fundamentals, Purchasing Options, Instance Configuration, Storage Basics, Key Pairs, Elastic Load Balancers and Session State

Unit IV (6 sessions)

AWS Storage Services: Introduction to Amazon S3, Essentials, Moving Data to S3, Performance, Permissions, Amazon S3 Encryption, Object Versioning, Storage Classes

AWS API Gateway: API Gateway Essentials, API Gateway Deployments and Stages, API Gateway Caching and Monitoring, API Gateway for S3

Unit V (6 sessions)

Introduction to Kubernetes, Designing a Kubernetes Cluster, Kubernetes API Primitives, Kubernetes Services & Network Primitives

Assessment methods

Task	Task type	Task mode	Weightage (%)
A1. Mid exam	Individual	Written	20
A2. Case / Project/Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	20
A3. End-term exam	Individual	Written (short/long)	60

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A1 & A2
2	Communicate effectively using a range of media	A1 & A2
3	Apply teamwork and leadership skills	A2
4	Find, evaluate, synthesize & use information	A1 & A2
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A2
8	Apply multidisciplinary approach to the context	A2

Learning and teaching activities

- Mixed pedagogy approach is adopted throughout the course. Classroom based face to face teaching, directed study, independent study via G-Learn, case studies, projects and practical activities (individual & group)

Teaching and learning resources

Soft copies of teaching notes/cases etc. will be uploaded onto the G-learn. Wherever necessary, printouts, handouts etc. will be distributed in the class. Prescribed text book will be provided to all. However you should not limit yourself to this book and should explore other sources on your own. You need to read different books and journal papers to master certain relevant concepts to analyse cases and evaluate projects. Some of these reference books given below will be available in our library.

Prescribed text book:
Thomas Erl, Ricardo Puttini, Zaigham Mahmood ,Cloud Computing: Concepts, Technology & Architecture, Prentice Hall, 2013.

Prescribed Reference books:
1. Mastering AWS Development by Uchit Vyas, Packt Publishing
       2. Kubernetes in Action by Marko Luksa, Manning Publications

Course Code: MOE809	**Course Title**: Online Course-II	
Trimester: VI	**Course Type:** Elective/MOOC	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Even while FinTech aims to provide relevant current courses in the curriculum, there would always be student desires to learn something different, which should be encouraged. The aim of providing this credit it to let students pick an online course that is relevant and in-line with their interests, for which they can obtain credits. Students have to discuss and decide the online course to be taken in consultation with their coordinator. Upon completing the formal requirement of the course and obtaining a certificate, it can be produced to obtain credits for this course.

LEARNING OBJECTIVES

- To be flexible and let students pursue their creative interests in other fields.
- To gain insights and understand the nuances of other relevant and current curriculum.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Obtain credits for this course on submission of the online course certificate obtained.	A3
2	Would be able to pursue their passion.	A3
3	Debate and justify their views when challenged about a methodology.	A3

Course outline and indicative content

This is an individual online course, that the students have to take from NSE, Coursera, CISI etc, after seeking approval from the assigned mentor/guide. Under guidance of a faculty students have to complete the course that they have taken by submitting the certificate obtained from the course. During the viva students will be interviewed by a panel on the learning from the online course.

Assessment methods

Task	**Task type**	**Task mode**	**Weightage (%)**
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

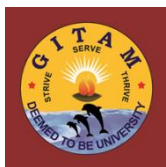|	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To consult on a weekly or fortnightly basis with the assigned guide to discuss progress and seek advice on direction/approach from the guide

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Course Code: MFT892	**Course Title**: Project-II	
Trimester: VI	**Course Type:** Elective	**Credits**: 3
Home Programme(s): MBA(FinTech)		
Course Leader:		

Course description and learning outcomes

Individual projects are meant to apply the learning from the prior courses, itcheck ones knowledge and completeness on a topics which are of interest. The aim is to develop articulation skills, which makes the students more rounded and builds confidence. Topics can vary from the subjects taught to general knowledge and current trends in the industry and country. This ensures that the student gains holistic knowledge. Students can pick any project that is current and if possible that will add value to the industry.

LEARNING OBJECTIVES
- To enhance knowledge, by learning about the current issues.
- To apply learnings into a project that will add value for the industry
- To learn how develop a concise and coherent project report.

On successful completion of this course, students will be able to:

	Learning Outcome	**Assessment**
1	Demonstrate confidence on the subject	A3
2	Articulate their thought process, through a presentation	A3
3	Debate and justify their views when challenged about a methodology.	A3

Course outline and indicative content

This is an individual/group depending on the complexity of the project, that the students have to decide. A project proposal is submitted within a week of the start of the trimester on what the project is likely to be. Under guidance of a faculty students have to complete the project, submit a report and present their projects to the rest of the team. Such projects is a basis of applying the learning coherently to a real world problem and resolving it. Depending on the data requirement students are expected to go out into the community to collate the data for analysis. During the presentation students will be interviewed by a panel. Even though this project is a course in Trimester-V, the report along with presentation to the panel is expected at the end of Trimester-VI, giving enough time to make this a well-managed project with exceptional output and learning.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

	Outcomes	Assessment
1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To consult on a weekly or fortnightly basis with the assigned guide to discuss progress and seek advice on direction/approach from the guide

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GITAM FinTech Academy

GITAM Institute of Management

Course Code: MFT893	**Course Title**: Viva-II
Trimester: VI	**Course Type:** Presentation/Oral **Credits**: 3
Home Programme(s): MBA(FinTech)	
Course Leader:	

Course description and learning outcomes

Viva is the verbal process to check ones knowledge and completeness on a topics which are of interest. The aim is to develop articulation skills, which makes the students more rounded and builds confidence. Topics can vary from the subjects taught to general knowledge and current trends in the industry and country. This ensures that the student gains holistic knowledge.

LEARNING OBJECTIVES
- To ensure that students enhancing their general knowledge.
- To develop inter-personal communication skills during interacting with.
- To learn how develop a concise and coherent project report.

On successful completion of this course, students will be able to:

	Learning Outcome	Assessment
1	Improve their confidence on the subject.	A3
2	Articulate their thought process, improve communication.	A3
3	Debate and justify their views when challenged about a methodology.	A3

Course outline and indicative content

This is the end of the year Viva, where a panel will be interviewing the students. This viva will test students understanding of the knowledge gained, the projects done, the industrial tours taken and check their assimilation and application of this knowledge.

Assessment methods

Task	Task type	Task mode	Weightage (%)
A3. Case / Project /Assignment	Groups* or Individual	Presentations/Report/Assignment with Q&A/Viva	100

Transferrable and Employability Skills

	Outcomes	Assessment

1	Know how to use online learning resources: G-Learn, online journals, etc.	A3
2	Communicate effectively using a range of media	A3
3	Apply teamwork and leadership skills	A3
4	Find, evaluate, synthesize & use information	A3
5	Analyze real world situation critically	A3
6	Reflect on their own professional development	A3
7	Demonstrate professionalism & ethical awareness	A3
8	Apply multidisciplinary approach to the context	A3

Learning and teaching activities

Individually driven

Teaching and learning resources

To come prepared based on the past course, current market trends, global economic growth etc. Should be ready to debate and express viewpoints to assess synthesis of knowledge.

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