King Fahd University of Petroleum & Minerals

Program Requirements and Core Course Descriptions

Bachelor of Integrated Design (ITD)

ITD Course Description

No.	Course no. \ code	Course Title	Course Bulletin Description
1.	**ITD101**	Design Survey	**ITD101 Design Survey (2-4-4)** "What is design, and Why is it important?". Core principles and theories of design ideas and innovation. Design thinking and problem-solving strategies and techniques. Hands-on introductory-level projects involving essential aspects, processes, and precedents of design. Fundamentals of visualization and communication techniques and multidimensional drawings. Research, examination, and analysis of selected groups of historical and contemporary case studies, concepts, theories, and design pioneers. *Pre-requisite: None* *Co-requisite: None*
2.	**ITD202**	Design Ideation	**ITD202 Design Ideation (2-4-4)** The impact of ideas on design and its end product. Function, form, and space. Creating, transforming, and advancing design concepts analytically and visually. Advanced interdisciplinary design research and thinking methodologies. Concept generation and ideation, design development, and processes. Hands-on intermediate design projects. Advanced multidimensional communication. Research and analysis of historical and contemporary perspectives on critical design theories concerning key concepts in design. *Pre-requisite: ITD101 or department approval* *Co-requisite: None*
3.	**ITD211**	Digital Visualization I	**ITD211 Digital Visualization I (0-6-3)** Fundamentals of digital visualization and computer-aided design. Analytical and critical visual thinking and problem-solving skills using digital representation tools. Visual elements of design, concepts and techniques for digital concept development and presentation. Foundations of digital multidimensional sketches, drawings, and rendering. Digital information design, portfolio design, and presentations. Introduction to generative industry-standard design tools that that utilize the use of Python and C (such as Rhino, Blender, Solidworks, Autodesk inventor, etc.). Introduction to rendering and lighting. *Pre-requisite: None* *Co-requisite: None*
4.	**ITD203**	Design Applications	**ITD203 Design Application (2-4-4)** Applications of design and its essential role in impacting daily human needs. Processes and techniques for creating holistic, physical, and virtual design solutions. Hands-on projects addressing issues of diverse practices of design application and theories. User-centric design, Play-theory, gamification, globalization, sustainability, affordances theory, and how people interact with the world. Design in response to context. *Pre-requisite: ITD202 or department approval* *Co-requisite: None*
5.	**ITD212**	Digital Visualization II	**ITD 212 Digital Visualization II (0-6-3)** Advanced digital visualizations and computer-aided design. Complex multidimensional sketches, drawings, and designs. Advanced digital 2D and 3D representation and modeling. Accurate and precise design elements, contexts, environments, and technical documentation. Interactive digital information tools and representation. Advanced

			applications of generative design tools and practices using industry-standard design applications. Introduction to motion, animation, and advanced rendering and lighting techniques. *Pre-requisite: ITD211 or department approval* *Co-requisite: None*
6.	**ITD304**	Function & Usability	**ITD304 Function & Usability (2-4-4)** Design concerning function and usability. Human factors, human-centered design, materials and manufacturing, and their role in enhancing the function and usability of design solutions. Data science, information gathering, and user preferences impact design outputs and trends. Usability research methodologies in the design-development process; contextual inquiry, surveys and interviews, focus groups, user profiling, usability testing, and others. Prototyping digital (e.g., digital twin) and physical (e.g., 3D printed) interventions. *Pre-requisite: ITD203 or department approval* *Co-requisite: None*
7.	**ITD313**	Prototyping and Fabrication	**ITD313 Prototyping and Fabrication (0-6-3)** Digital prototyping, digital-twins technologies, and fabrication. Conceptual development, detailing, and manufacturing of prototypes. Basics of ethics of materials, installations, and structures. Simplification of complex designs and breaking-down techniques including expanded and exploded 3D detailed models. Research, exploration, and analysis of digital creation and fabrication techniques and technologies. *Pre-requisite: ITD212 and CE202 or department approval* *Co-requisite: None*
8.	**ITD305**	Emotional Design and Design for Aging	**ITD 305 Emotional Design and Design for Aging (2-4-4)** Emotional design and design for aging. Designing for quality of life and human experiences. Emotional intelligence and human factors theories and practices. Advanced usability testing methodologies. Experience design, narrative design, interactive storytelling and installations, cultural anthropology, and ethnographic studies. Design's quality and longevity and the study of the relationships between humans, objects, and the systems connecting them. *Pre-requisite: ITD304 or department approval* *Co-requisite: None*
9.	**ITD314**	XR representations I	**ITD314 XR representations I (0-6-3)** Introduction to mixed-realities and immersive environments, and navigation and interaction technologies. Designing, adapting, evaluating, and responding to design challenges and constraints for mixed-realities environments. Narrative design, game physics, and rigging. Integration between mixed-reality environments, user preferences, design evaluation studies, and case study analyses. *Pre-requisite: ITD313 or department approval* *Co-requisite: None*
10.	**ITD399**	Summer Training	**ITD399 Summer Training (0-0-1)** A continuous period of 8 weeks of summer training spent in the industry working in any of the fields of design. The training should be carried out in an organization with an interest in one or more of the design fields. Upon completion of the program, the student must submit a formal written report of his work. *Pre-requisite: CGS399, ENGL214 and Junior Standing*

			Co-requisite: None
11.	**ITD406**	Sandbox Exploration	**ITD406 Sandbox Exploration (2-5-5)** Exploration and imaginative design. Futuristic, unrealistic, and unpredictable design challenges and outcomes. Sustainability factors and practices. Interaction between predefined systems and aspects of unexpected outcomes and challenges. Generative design concepts and techniques. Technological advancements and the integration and embedding of technology in daily life and futuristic interdisciplinary designs. *Pre-requisite: ITD305 or department approval* *Co-requisite: None*
12.	**ITD415**	XR representations II	**ITD315 XR representations II (0-6-3)** Advanced applications of mixed-realities and immersive environments, and navigation and interaction technologies. Innovative solutions, experimentation, and problem-solving to challenges and constraints using mixed-realities representation and immersive technologies. Prototype validation and market-ready solutions using VR, AR, or XR technologies. *Pre-requisite: ITD 314* *Co-requisite: None*
13.	**ITD407**	Interdisciplinary Senior Design	**ITD 407 Interdisciplinary Senior Design (2-5-5)** Interdisciplinary senior design project. Research methodology, brief formulation, project planning techniques, information documentation, design analysis, and evaluation. Concept development and generation, market surveys, usability testing, manufacturing processes and study, material, and implementation. Project management skills and design ethics. *Pre-requisite: ITD406 and ITD415* *Co-requisite: None*

Existing Courses in Other Programs Included in the ITD Program

No.	Program	Course Title	Course Bulletin Description
1.	PHYS	**General Physics I**	**PHYS 101 General Physics I (3-3-4)** Particle kinematics and dynamics; conservation of energy and linear momentum; rotational kinematics; rigid body dynamics; conservation of angular momentum; simple harmonic motion; gravitation; the statics and dynamics of fluids. *Prerequisite: None*
2.	MATH	**Calculus I**	**MATH 101 Calculus I (4-0-4)** Limits and continuity of functions of a single variable. Differentiability. Techniques of differentiation. Implicit differentiation. Local extrema, first and second derivative tests for local extrema. Concavity and inflection points. Curve sketching. Applied extrema problems. The Mean Value Theorem and applications. *Prerequisite: One-year preparatory mathematics or its equivalent*
3.	ICS	**Introduction to Programming in Python and C**	**ICS 104: Introduction to Programming in Python and C (2-3-3)** Overview of computer hardware and software. Programming in Python with emphasis on basic program constructs: variables, assignments, expressions, decision structures, looping, functions, lists, files, and exceptions; Introduction to objects and classes. Programming in C with emphasis on pointers and functions with output parameters. Simple multidisciplinary problem solving in science, engineering, and business. *Prerequisites: None*
4.	MATH	**Calculus II**	**MATH 102 Calculus II (4-0-4)** Definite and indefinite integrals of functions of a single variable. Fundamental Theorem of Calculus. Techniques of integration. Hyperbolic functions. Applications of the definite integral to area, volume, arc length and surface of revolution. Improper integrals. Sequences and series: convergence tests, integral, comparison, ratio, and root tests. Alternating series. Absolute and conditional convergence. Power series. Taylor and Maclaurin series. *Prerequisite: MATH 101*
5.	CE	**Statics & Strength of Materials**	**CE 202 Statics & Strength of Materials (3-0-3)** Basic concepts and principles of mechanics; equilibrium of particles in two dimensions; definition of moment and couple; reduction of systems forces; equilibrium of rigid bodies in two dimensions; analysis of truss-type structures and internal forces; geometric properties of cross-section area; centroid and moments of inertia; shear and bending moment diagrams in beams; stress, Stress-strain relationships; stress and deformation of axially loaded members; stress-concentration; thermal stresses; pressure-vessels; torsion-stress and deformation; elastic bending and shear stresses in beams; compound stresses; stress transformation. *Note: Not open for CE students, Not to be taken for credits with CE 201 or CE 203* *Prerequisite: PHYS 101*
6.	ISE	**Introduction to Data Science**	**ISE 291 Introduction to Data Science (3-0-3)** A hands-on introductory level course on data science techniques and applications. Preliminary statistics, programming, and SQL. Basic data

			acquisition, cleaning, manipulation, and pre-processing. Emphasis on: Data understanding and preparation; Exploratory data analysis and visualization. Implementing and validating linear and penalized regression, basic classification, and basic clustering methods. Introduction to big data analysis. *Prerequisite: MATH 102 or MATH 106, ICS 104*
7.	ISE	**Engineering Probability and Statistics**	**ISE 205 Engineering Probability and Statistics (3-0-3)** Data description and presentation. Basic concepts in probability. Random variables and probability distributions. Joint Probability Distributions. Covariance and correlation. Sampling distributions. Point estimation of parameters. *Prerequisite: MATH 102*
8.	COE	**Introduction to Artificial Intelligence**	**COE 292 Introduction to Artificial Intelligence (3-0-3)** Introduction to AI; Agents and environments. Uninformed vs. informed search. Constraint satisfaction. Probabilistic inference; conditional probability and independence. Supervised learning using Nearest Neighbor and SVM. Clustering with mean-shift algorithm. Overview of Neural Networks and training. Overview of deep learning and applications. Feature extraction techniques in Computer Vision. Applications in reinforcement learning. Ethical concerns in AI. *Prerequisite: ISE 291*
9.	SWE	**Web Engineering and Development**	**SWE 363 Web Engineering and Development (3-0-3)** Fundamentals of web and mobile applications and how they impact people's lives; Building responsive front-end web and mobile apps; Back-end programming of dynamic and data-driven websites; Development frameworks for web and mobile apps; Security issues of web applications; Practical applications to real-world problems. *Prerequisites: Junior Standing*
10.	BUS	**Business & Entrepreneurship**	**BUS 200 Business & Entrepreneurship (3-0-3)** Overview of the fourth industrial revolution; opportunity cost, comparative advantage, supply and demand; ownership structures, legal system, contracting; business ethics, socio-cultural factors; managerial functions, business strategies, organizational structures; consumer behavior, segmentation, targeting, positioning, marketing mix; financial statements, financial statement analysis; financial markets, time value of money, risk and return; entrepreneur, entrepreneurial process, innovation, opportunities, business model, customer validation, entrepreneurial team and funding, digital entrepreneurship. *Prerequisite: None*
11.	ISE	**Engineering Economic Analysis**	**ISE 307 Engineering Economic Analysis (3-0-3)** Introduction to concepts of economic decision-making from a cash flow viewpoint. It includes present worth analysis, cash flow equivalence, rates of return, replacement analysis, benefit-cost analysis, depreciation and taxes, and projects break-even point, selection, and sensitivity analysis. *Prerequisite: Junior Standing*

12.	SWE	**387 Software Project Management**	**SWE 387 Software Project Management (3-0-3)** Introduction to project management concepts, managing time, cost, change, risk, quality, communication, and people; development and management standards and managing software development projects. *Prerequisites: Junior Standing*

Bachelor of Science in Integrated Design (ITD)

جامعة الملك فهد للبترول والمعادن
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Four-year Academic Plan

Freshman Year												
Course	Type	Title	LT	LB	Cr		Course	Type	Title	LT	LB	Cr
PHYS101	MS	General Physics I	3	3	4		ITD101	CR	Design Survey	2	4	4
MATH101	MS	Calculus I	4	0	4		MATH102	MS	Calculus II	4	0	4
ENGL101	GS	Intr. To Academic Discourse	3	0	3		ICS104	DF	Intro to Python and C	2	3	3
PE101	GS	Health and Physical Education	0	2	1		ENGL102	GS	Intro to Report Writing	3	0	3
IAS101	GS	Belief and Ethics	2	0	2		IAS121	GS	Language Foundation	2	0	2
		Total	12	5	14				Total	13	7	16
Sophomore Year												
Course	Type	Title	LT	LB	Cr		Course	Type	Title	LT	LB	Cr
ITD202	CR	Design Ideation	2	4	4		ITD203	CR	Design Application	2	4	4
ITD211	CR	Digital Visualization I	0	6	3		ITD212	CR	Digital Visualization II	0	6	3
CE202	MS	Statics & Strength of Material	3	0	3		ISE205	CM	Engineering Probability and Statistics	3	0	3
ISE291	DF	Intro to Data Science	3	0	3		COE292	DF	Intro to Artificial Intelligence	3	0	3
ENGL214	GS	Academic & Prof. Communication	3	0	3		IAS212	GS	Professional Ethics	2	0	2
		Total	11	10	16				Total	10	10	15
Junior Year												
Course	Type	Title	LT	LB	Cr		Course	Type	Title	LT	LB	Cr
ITD304	CR	Function and Usability	2	4	4		ITD305	CR	Emotional Design & Design for Aging	2	4	4
ITD313	CR	Prototyping and Fabrication	0	6	3		ITD314	CR	XR Representation I	0	6	3
SWE363	CM	Web Engineering and Development	3	0	3		ISE307	CM	Engineering Economic Analysis	3	0	3
BUS200	DF	Business and Entrepreneurship	3	0	3		SWE387	CM	Software Project Management	3	0	3
GS xxx	GS	Global Studies Elective	3	0	3		GS392	DF	Career Essentials	1	0	1
							XXX xxx	BS	Business Elective I	3	0	3
		Total	11	10	16				Total	11	12	17
Summer Session (junior)							ITD399	CR	Summer Training	0	0	1
Senior Year												
Course	Type	Title	LT	LB	Cr		Course	Type	Title	LT	LB	Cr
ITD406	CR	Sandbox Exploration	2	5	5		ITD407	CR	Interdisciplinary Senior Design	2	5	5
ITD415	CR	XR Representation II	0	6	3		ITDxxx	CR	ITD Elective II or approved Cx	3	0	3
ITDxxx	CR	ITD Elective I or approved Cx	3	0	3		XXX xxx	CR	Free Elective II or approved Cx	3	0	3
XXX xxx	CR	Free Elective I or approved Cx	3	0	3		XXX xxx	CM	Computing Elective	3	0	3
XXX xxx	BS	Business Elective II	3	0	3		IAS xxx	GS	Islamic and Arabic Studies Elective	2	0	2
		Total	11	11	17				Total	13	5	16
									Total Credit Hours			128

MS	Math and Science	15
GS	General Studies	22
CR	Core Subjects	46
CE	Core Electives	6
CM	Computing	15
BS	Business	6
TE	Technical Electives	0
FE	Free Electives	6
DF	Digital/Business Foundation	12
	Total	128

Degree Requirements for the Bachelor of Science in Integrated Design (ITD)

Program Study Plan Requirements

Year	Term	Course Code	Course Title	Required or Elective	Pre- / Co- Requisite Courses	Cr Hrs	Type of requirements (Institution, College, or Department)
Preparatory Year	1	ENGL01-xx	Prep. English I (First Quarter)	Required	None	4	Institution
		ENGL02-xx	Prep. English II (Second Quarter)	Required	None	4	Institution
		MATH001	Prep. Math I	Required	None	4	Institution
		PYP001	Prep. Physical Science	Required	None	2	Institution
		PYP003	Life Skills	Required	None	1	Institution
		PE001	Prep. Health and Physical Educ. I	Required	None	1	Institution
		Total Credit Hours of Term 1				**16**	
	2	ENGL03-xx	Prep. English III (Third Quarter)	Required	None	4	Institution
		ENGL04-xx	Prep. English IV (Fourth Quarter)	Required	None	4	Institution
		MATH002	Prep. Math II	Required	None	4	Institution
		PYP002	Prep. Computer Science	Required	None	1	Institution
		PYP004	Prep. Eng. Technology	Required	None	1	Institution
		PE002	Prep. Health and Physical Educ. II	Required	None	1	Institution
		Total Credit Hours of Term 2				**15**	
First Year — (Freshman)	1	PHYS101	General Physics I	Required	None	4	Program
		MATH101	Calculus I	Required	None	4	Program
		ENGL101	Introduction to Academic Discourse	Required	None	3	Institution
		PE101	Health and Physical Education	Required	None	1	Institution
		IAS111	Belief & its Consequences	Required	None	2	Institution
		Total Credit Hours of Term 1				**14**	
	2	ITD101	Design Survey	Required	None	4	Program
		MATH102	Calculus II	Required	MATH101	4	Program
		ICS104	Introduction to Programming in Python and C	Required	None	3	Institution
		ENGL102	Intro to Report Writing	Required	ENGL101	3	Institution
		IAS121	Language Foundation	Required	None	2	Institution
		Total Credit Hours of Term 2				**16**	
Second Year — (Sophomore)	1	ITD202	Design Ideation	Required	ITD101 or department approval	4	Program
		ITD211	Digital Visualization I	Required	None	3	Program
		CE202	Statics & Strength of Material	Required	PHYS101	3	Program
		ISE291	Intro to Data Science	Required	MATH102	3	Institution
		ENGL214	Academic & Prof. Communication	Required	ENGL102	3	Institution
		Total Credit Hours of Term 1				**16**	
	2	ITD203	Design Application	Required	ITD202 or department approval	4	Program
		ITD212	Digital Visualization II	Required	ITD211 or department approval	3	Program
		ISE205	Engineering Probability and Statistics	Required	ICS104 & MATH102	3	Program
		COE292	Intro to Artificial Intelligence	Required	None	3	Institution
		IAS212	Professional Ethics	Required	None	2	Institution
		Total Credit Hours of Term 2				**15**	
Third Year — (Junior)	1	ITD304	Function and Usability	Required	ITD 203 or department approval	4	Program
		ITD313	Prototyping and Fabrication	Required	ITD212 & CE 202 or department approval	3	Program
		SWE363	Web Engineering and Development	Required	Junior Standing	3	Program
		BUS200	Business and Entrepreneurship	Required	None	3	Institution
		GS xxx	Global Studies Elective	Required	None	3	Institution
		Total Credit Hours of Term 1				**16**	
	2	ITD305	Emotional Design & Design for Aging	Required	ITD304 or department approval	4	Program
		ITD314	XR Representation I	Required	ITD313 or department approval	3	Program
		ISE307	Engineering Economic Analysis	Required	Junior Standing	3	Program
		SWE387	Software Project Management	Required	Junior Standing	3	Program
		GS392	Career Essentials	Required	None	1	Institution
		XXX xxx	Business Elective I	Required	None	3	Program
		Total Credit Hours of Term 2				**17**	
	S	ITD 399	Summer Training	Required	ENGL 214 & CGS 392	1	Institution
		Total Credit Hours of Summer Term				**1**	
Fourth Year — (Senior)	1	ITD406	Sandbox Exploration	Required	ITD305 or department approval	5	Program
		ITD415	XR Representation II	Required	ITD314 or department approval	3	Program
		ITDxxx	ITD Elective I or approved Cx	Required	Program specific	3	Program
		XXX xxx	Free Elective I or approved Cx	Elective	Department Specific	3	Program
		XXX xxx	Business Elective II	Elective	Department Specific	3	Program
		Total Credit Hours of Term 1				**17**	
	2	ITD407	Interdisciplinary Senior Design	Required	ITD406	5	Program
		ITDxxx	ITD Elective II or approved Cx	Required	Program specific	3	Program
		XXX xxx	Free Elective II or approved Cx	Elective	Department Specific	3	Program
		XXX xxx	Computing Elective	Elective	Department Specific	3	Program
		IAS xxx	Islamic and Arabic Studies Elective	Required	None	2	Institution
		Total Credit Hours of Term 2				**16**	

Year	Term	Course Code	Course Title	Required or Elective	Pre- / Co- Requisite Courses	Cr Hrs	Type of requirements (Institution, College, or Department)
Total Credit Hours						**128**	

Curriculum Structure

Every student majoring in Integrated Design (ITD) must complete the following curriculum:

1. MATH/SCIENCE

No.	Course	Course Name	Cr. Hrs.
1.	PHYS101 (3-3-4)	General Physics I	4
2.	MATH101 (4-0-4)	Calculus I	4
3.	MATH102 (4-0-4)	Calculus II	4
4.	CE202 (3-0-3)	Statics and Strength of Materials	3
	Total		**15**

2. GENERAL STUDIES

	Course	Course Name	Cr. Hrs.
1.	IAS111 (2-0-2)	Belief and its Consequences	2
2.	IAS121 (2-0-2)	Practical Grammar	2
3.	IAS212 (2-0-2)	Professional Ethics	2
4.	IASxxx (2-0-2)	IAS Elective (IAS 303 or IAS 333)	2
5.	ENGL101 (3-0-3)	Introduction to Academic Discourse	3
6.	ENGL102 (3-0-3)	Introduction to Report Writing	3
7.	ENGL214 (3-0-3)	Academic and Professional Communication	3
8.	GS392 (3-0-3)	Career Essentials	1
9.	GSxxx (3-0-3)	GS Elective	3
10.	PE101 (0-2-1)	Physical Education I	1
	Total		**22**

3. DIGITAL AND BUSINESS FOUNDATION

	Course	Course Name	Cr. Hrs.
1	ICS104 (2-3-3)	Introduction to Programming in Python and C	3
2	ISE291 (3-0-3)	Introduction to Data Science	3
3	COE292 (3-0-3)	Introduction to Artificial Intelligence	3
4	BUS200 (3-0-3)	Business and Entrepreneurship	3
	Total		**12**

4. MAJOR AREA
CORE REQUIREMENTS

	Course	Course Name	Cr. Hrs.
1.	PHYS101 (3-3-4)	General Physics I	4
2.	MATH101 (4-0-4)	Calculus I	4
3.	ITD101 (2-4-4)	Design Survey	4
4.	MATH102 (4-0-4)	Calculus II	4
5.	ITD202 (2-4-4)	Design Ideation	4
6.	ITD211 (0-6-3)	Digital Visualization I	3
7.	CE202 (3-0-3)	Statics & Strength of Materials	3
8.	ISE205 (3-0-3)	Engineering Probability and Statistics	3
9.	ITD203 (2-4-4)	Design Applications	4
10.	ITD212 (0-6-3)	Digital Visualization II	3
11.	ITD304 (2-4-4)	Function & Usability	4
12.	ITD313 (0-6-3)	Prototyping and Fabrication	3
13. /	ITD305 (2-4-4)	Emotional Design and Design for Aging	4
14.	ITD314 (0-6-3)	XR representations I	3
15.	SWE363 (3-0-3)	Web Engineering and Development	3
16.	ISE307 (3-0-3)	Engineering Economic Analysis	3
17.	ITD399 (0-0-1)	Summer Training	1

18.	ITD406 (2-5-5)	Sandbox Exploration	5
19.	ITD415 (0-6-3)	XR representations II	3
20.	ITD407 (2-5-5)	Interdisciplinary Senior Design	5
21.	XXXxxx (3-0-3)	Business Elective I	3
22.	XXXxxx (3-0-3)	Business Elective II	3
23.	XXXxxx (3-0-3)	Computing Elective I	3
	Total		**76**

5. Computing Electives (from the list or department approval)

	Department	Course	Credit Hours
1.	Software Engineering	SWE302 Game Programming	3
2.		SWE490 Special Topics I	3
3.		SWE491 Special Topics II	3
4.		SWE497 Undergraduate Research	3
5.	Information and Computer Science	ICS483 Computer Vision	3
6.		ICS490 Special Topics I	3
7.		ICS491 Special Topics II	3
8.		ICS497 Directed Undergraduate Research	3
9.	Industrial and Systems Engineering	ISE324 Work and Process Improvements	3
10.		ISE430 Industrial Engineering in Healthcare Systems	3
11.		ISE447 Decision Making	3
12.		ISE468 Introduction to Machine Learning and Data Analytics	3
13.		ISE496 Industrial Strategic Planning & Balanced Scorecard	3

6. Business Electives (from the list or department approval)

	Department	Course	Credit Hours
1.	Marketing	MKT 250 Principles of Marketing	3
2.		MKT 360 Product & Brand Management	3
3.		MKT 370 Integrated Marketing Communications	3
4.		MKT 390 New Product Development	3
5.		MKT 410 Consumer Behavior	3
6.		MKT 430 Services Marketing	3
7.		MKT 450 Strategic Marketing	3
8.		MKT 460 Advertising	3
9.		MKT 470 Personal Selling and Sales Management	3
10.		MKT 485 Digital Marketing	3
11.		ENTR 413 Entrepreneurial Marketing	3
12.		MKT 495 Special Topics in Marketing	3
13.	Management	MGT 301 Principles of Management	3
14.		MGT 310 Organization Behavior	3
15.		MGT 413 International Management	3
16.		MGT 430 Organizational Leadership	3
17.		MGT 440 International Business	3
18.		MGT 450 Management of Innovation and Change	3
19.		MGT 495 Special Topics in Management	3
20.	Entrepreneurship	ENTR 322 Introduction to Entrepreneurship	3
21.		ENTR 413 Entrepreneurial Marketing	3
22.		ENTR 415 Social Entrepreneurship	3
23.		ENTR 416 Entrepreneurship and New Venture Creation	3
24.		ENTR 423 Small and Medium Enterprise Management	3