

Master of Science Curriculum

S/N	DISCIPLINE	Fall Subjects	Spring Subjects	Fall Subjects
1	Accounting and	*Cross Sectional Econometrics	*Qualitative Research Methods	*International Finance
	Finance	*Corporate Financial	*International Accounting	*Corporate Governance
		Reporting	Practice and Regulation	in an Accounting
		*Asset Pricing	*Portfolio Investment	Context (Optional)
		*Corporate Finance	*Advanced Management	*Accounting & Society
		*Qualitative Research	Accounting	(Optional)
		Methods	*Mergers & Acquisitions:	_
		*Current Issues in Empirical	Economic & Financial	
		Finance (Optional)	*Time Series Econometrics	Dissertation
		*Real Options in Corporate	(Optional)	
		Finance (Optional)	*Financial Statement Analysis	
		(Optional)	(Optional)	
2	Actuarial Science	*Martingales Theory for	*Stochastic Modeling in	*Simulation & Risk
		Finance	Finance	Analysis
		*Time Series Analysis and	*General Insurance	*Business to Business
		Forecasting in Finance	*Risk Theory	Marketing
		*Generalized Linear Models	*Quantitative Risk	
		and Survival Analysis	Management	
		*Actuarial Models I	*Actuarial Models II	Dissertation
		*Insurance Law		
3	Advanced	*Investment	*Security Analysis	*Futures Trading
	Professional	*Financial Institutions And	*Personal Financial Planning	Strategies
	Accounting	Markets	*Problems In Business Finance	*Introduction To Risk
		*International Financial	*Short-Term Financial	Management And
		Management	Management	Insurance (Optional)
		*Intermediate Financial	*Speculative Markets	
		Management	*Federal Income Tax	
		*Strategic and Operations	(Corporate) (Optional)	Dissertation
		Management	*Real Estate Finance (Optional)	
		*Federal Income Tax		
		(Individual) (Optional)		
		*Option Pricing: Theory And		
		Strategic Applications		
		(Optional)		
4	Advanced Safety	*Risk Engineering	*Transport Safety Management	*Road Safety
	Science Practice	*Human Factors Engineering	*Emergency Services Safety	Investigation
		*Accident Forensics	*Air Safety Investigation	*Rail Safety
				Investigation
				*Industrial Accident

				Investigation
				Dissertation
5	Agribusiness Management	*Applied Econometrics *Behavioral and Experimental Economics *Business Development and Innovation *Entrepreneurship and Innovation *Microeconomic and Econometric Production Analysis *Applied Environmental and Natural Resource Economics (Optional)	*Industrial Organization *Economic Valuation Methods and Cost-Benefit Analysis *Advanced Development Economics *Advanced International Trade *Agricultural and Food Policy *Agricultural Value Chains in Developing Countries (Optional)	*Applied Economics of Consumption *Computational Methods for Policy Analysis in AgriFood Markets *Economic Efficiency and Benchmarking *Incentives and Regulation (Optional) *Economic Growth and Development (Optional) *Contracts and Cooperatives (Optional)
6	Applied Finance	*Modern Finance	*Econometric Methods	Dissertation *Public Policy
	Applied Finance	*Corporate Finance *Macroeconomic Analysis *Applied Microeconomics (Optional) *Development Finance(Optional)	*Asset Pricing *Monetary Economics *Applied Macroeconomics (Optional) *Public Economics (Optional)	Evaluation (Optional) *International Trade (Optional)
		*International Money and Finance (Optional)		Dissertation
7	Applied Psychology	*Work Design, Organizational Change and Development *Applying Psychology to Work and Organizations *Leadership, Engagement and Motivation	*Research Methods for Occupational Psychologists *Selection and Psychological Testing in Organizations *Statistical Methods for Occupational Psychologists	*Qualitative Research Methods (e.g. Grounded theory, discourse analysis)
		*Learning, Training and Development *Practical Issues in Psychological Research (e.g. working with children, RCTs)	*Well-being and Work *Advanced General Methods in Psychology (e.g. experience sampling, eye-tracking).	Dissertation
8	Applied Statistics	*Linear Models & Non- parametric Regression *Statistical Computing *Statistical Inference *Multivariate Statistics *Quality Assurance and Control	*Generalized Linear Models & Survival Analysis *Longitudinal Data Analysis *Markov Chain Monte Carlo (MCMC) *Design and Analysis of Experiments *Strategic and Operations Management	Dissertation
9	Asset & Maintenance Management	*Fundamentals of asset management *Reliability Centered Maintenance *Failure Modes Effect Cause and Analysis (FMECA) *Condition Monitoring and Risk-Based Inspection *Data analysis and reliability predictions *Auditing Asset Management	*Preventive, Predictive, Reactive and Proactive Maintenance *Computer Maintenance Management Systems (CMMS) *Data management and verification *Spares and Materials Management (Optional)	*Strategic Asset Management *Asset Management & Maintenance Strategy *Design for Reliability & Asset Management *Turnaround Management Dissertation

		& Maintenance Organizations		
		(Optional)		
10	Banking &	*Econometric Methods	*Macroeconomic Analysis	*Monetary Economics
	Finance	*Modern Theory of Banking	*Applied Macroeconometrics	*Public Economics
		and Finance	*Development Finance	*Public Policy
		*International Money and	*International Trade	Evaluation
		Finance	*Industrial Organization	
		*Asset Pricing		
		*Applied Microeconometrics		Dissertation
11	Biostatistics	*Introduction to Statistical	*Introduction to Statistical	*Survival Analysis.
		Programming I (R). This	Programming II (SAS) . This	Introduction to concepts
		class is an introduction to	class is an introduction to	and techniques used in
		programming in R, targeted at	programming in SAS, targeted	the analysis of time to
		statistics majors with minimal	at statistics majors with	event data, including
		programming knowledge,	minimal programming	censoring, hazard rates,
		which will give them the skills	knowledge, which will give	estimation of survival
		to grasp now statistical	statistical software works	techniques applications
		suit their needs, recombine	tweek it to suit their peeds	to clinical trials. Interval
		existing pieces of code and	recombine existing pieces of	censoring informative
		when needed create their own	code and when needed create	censoring competing
		programs. Students will learn	their own programs. Students	risks, multiple events
		the core of ideas of	will learn the core of ideas of	and multiple endpoints.
		programming (functions,	programming (data step,	time dependent
		objects, data structures, input	procedures, macros, ODS, input	covariates;
		and output, debugging, and	and output, debugging, and	nonparametric and semi-
		logical design) through writing	logical design) through writing	parametric methods.
		code to assist in numerical and	code to assist in numerical and	Prerequisite(s):
		graphical statistical analyses.	graphical statistical analyses.	Introduction to
		Students will learn how to	Students will learn how to write	Statistical Theory and
		write maintainable code, and	maintainable code, and to test	Methods I and
		to test code for correctness.	code for correctness. They will	Introduction to
		They will then learn how to set	then learn how to set up	Statistical Theory and
		up stochastic simulations and	stochastic simulations and how	Methods II, or
		now to work with and filter	to work with and filter large	permission of the
		large data sets. Since code is	important form of	Studios
		communication among	communication among	*Categorical Data
		scientists students will learn	scientists students will learn	Analysis Topics in
		how to comment and organize	how to comment and organize	categorical modeling
		code to achieve	code to achieve reproducibility.	and data
		reproducibility. Programming	Programming techniques and	analysis/contingency
		techniques and their	their application will be closely	tables; measures of
		application will be closely	connected with the methods and	association and testing;
		connected with the methods	examples presented in the co-	logistic regression; log-
		and examples presented in the	requisite course. The primary	linear models;
		co-requisite course. The	programming package focus	computational methods
		primary programming package	used in this course will be SAS.	including iterative
		used in this course will be R.	Prerequisite(s): None;	proportional fitting;
		Prerequisite(s): None;	familiarity with linear algebras	models for sparse data;
		tamiliarity with linear algebras	1s helptul	Poisson regression;
		1s nelptul	Corequisite(s): Applied	models for ordinal
		Corequisite(s): Applied	Biostatistical Methods II	categorical data, and
		Diostatistical Methods I *Introduction to Statistical	of Biostatistics II Successful	Prerequisite(s):
		Theory and Mathods I. This	working Biostatisticians draw	Introduction to
		covers a formal introduction to	on a wide range of skills	Statistical Theory and
		the basic theory and methods	including knowledge of	Methods I Applied
		of probability and statistics.	biostatistical theory and	Biostatistical Methods I.
1	1			

	including topics in probability	
	theory with an emphasis on	
	those needed in statistics, as	
	well as probability and sample	
	spaces, independence,	
	conditional probability,	
	random variables, parametric	
	families of distributions,	
	sampling distributions, and the	
	central limit theorem. Core	
	concepts are mastered through	
	mathematical exploration,	
	simulations, and linkage with	
	the applied concepts studied in	
	Introduction to Statistical	
	Theory and Methods II.	
	Prerequisite(s): Calculus or its	
	equivalent (multivariate	
	calculus) preferred. Familiarity	
	with linear algebras is helpful.	
	*Applied Biostatistical	
	Methods I. This covers	
	introduction to study design.	
	descriptive statistics, and	
	analysis of statistical models	
	with one or two predictor	
	variables. Topics include	
	principles of study design,	
	basic study designs,	
	descriptive statistics, sampling,	
	contingency tables, one- and	
	two-way analysis of variance,	
	simple linear regression, and	
	analysis of covariance. Both	
	parametric and non-parametric	
	techniques are explored. Core	
	concepts are mastered through	
	team-based case studies and	
	analysis of authentic research	
	problems encountered by	
	program faculty and	
	demonstrated in practicum	
	experiences in concert with	
	Introduction to the Practice of	
	Biostatistics I. Computational	
	exercises will use the R and	
	SAS packages.	
	Prerequisite(s): 2 semesters of	
	calculus or its equivalent	
	(multivariate calculus	
	preferred). Familiarity with	
ļ	linear algebras is helpful.	l
ļ	Corequisites(s): Introduction	l
ļ	to Statistical Theory and	l
ļ	Methods I, Introduction to the	l
ļ	Practice of Biostatistics I,	l
ļ	Introduction to Statistical	l
ļ	Programming I (R).	l
	*Introduction to the Practice	L

methods, understanding of general biology and medicine, and communication with collaborators at all levels. This course will build on fundamentals learned in Introduction to Statistical Theory and Methods I, Applied Biostatistical Methods I and Introduction to the Practice of Biostatistics I with an emphasis on integrating that knowledge in practice. The course will be primarily participatory with students interacting with top flight researchers to design biostatistical analyses. Researcher and student presentations will be a large part of the course, supplemented with readings from the literature. As with Introduction to the Practice of Biostatistics I, there will be strong emphasis on the development of communication skills via written and oral presentations.

Prerequisite(s): Introduction to the Practice of Biostatistics I Corequisite(s): Introduction to Statistical Theory and Methods II, Applied Biostatistical Methods II

*Statistical Methods for Learning and Discovery. This course surveys a number of techniques for high dimensional data analysis useful for data mining, machine learning and genomic applications, among others. Topics include principal and independent component analysis, multidimensional scaling, tree based classifiers, clustering techniques, support vector machines and networks. and techniques for model validation. Core concepts are mastered through the analysis and interpretation of several actual high dimensional genomics datasets. Prerequisite(s): Introduction to Statistical Theory and Methods I through Introduction to the Practice of Biostatistics II, or their equivalents *Clinical Trial Design and

Introduction to Statistical Theory and Methods II, and Applied **Biostatistical Methods II** *Analysis of **Correlated and** Longitudinal Data. Topics include linear and nonlinear mixed models; generalized estimating equations; subject specific versus population average interpretation; and hierarchical model. Prerequisite(s): Introduction to Statistical Theory and Methods I, Applied Biostatistical Methods I, Introduction to Statistical Theory and Methods II, and Applied **Biostatistical Methods** II. *Generalized Linear

Models. The class introduces the concept of exponential family of distributions and link function, and their use in generalizing the standard linear regression to accommodate various outcome types. Theoretical framework will be presented but detailed practical analyses will be performed as well, including logistic regression and Poisson regression with extensions. Majority of the course will deal with the independent observations framework. However, there will be substantial discussion of longitudinal/clustered data where correlations within clusters are expected. To deal with such data the Generalized Estimating Equations and the Generalized Linear Mixed models will be introduced. An

	of Biostatistics I. This covers	Analysis. Topics include:	introduction to a
	introduction to biology at a	history/background and process	Bayesian analysis
	level suitable for practicing	for clinical trial, key concepts	approach will be
	biostatisticians and directed	for good statistics practice	presented, time
	practice in techniques of	(GSP)/good clinical practice	permitting.
	statistical collaboration and	(GCP), regulatory requirement	Prerequisite(s):
	communication. With an	for pharmaceutical/clinical	Introduction to
	emphasis on the connection	development, basic	Statistical Theory and
	between biomedical content	considerations for clinical trials,	Methods I, Applied
	and statistical approach, this	designs for clinical trials,	Biostatistical Methods I,
	course helps unify the	classification of clinical trials,	Introduction to
	statistical concepts and	power analysis for sample size	Statistical Theory and
	applications learned in	calculation, statistical analysis	Methods II, and Applied
	Introduction to Statistical	for efficacy evaluation,	Biostatistical Methods
	Theory and Methods I and	statistical analysis for safety	II.
	Applied Biostatistical Methods	assessment, implementation of	
	I. In addition to didactic	a clinical protocol, statistical	
	sessions on biomedical issues.	analysis plan, data safety	Dissertation:
	students are introduced to	monitoring, adaptive design	Completed during a
	different areas of biostatistical	methods in clinical trials	student's final year of
	practice at an accredited	(general concepts, group	study, the project is
	facility of a Medical Center.	sequential design. dose finding	performed under the
	Biomedical topics are	design, and phase I/II or phase	direction of a faculty
	organized around the	II/III seamless design) and	mentor and is intended
	fundamental mechanisms of	controversial issues in clinical	to demonstrate general
	disease from both evolutionary	trials	mastery of biostatistical
	and mechanistic perspectives	Prerequisite(s): Introduction to	practice
	illustrated using examples	Statistical Theory and Methods	Prerequisite(s):
	from infectious disease, cancer	I and Introduction to Statistical	Introduction to
	and chronic /degenerative	Theory and Methods II. or	Statistical Theory and
	disease. In addition, students	permission of the Director of	Methods I through
	learn how to read and interpret	Graduate Studies	Introduction to the
	research and clinical trial	*Observational Studies.	Practice of Biostatistics
	papers. Core concepts and	Methods for causal inference.	I
	skills are mastered through	including confounding and	Corequisite(s):
	individual reading and class	selection bias in observational	Statistical Methods for
	discussion of selected	or quasi-experimental research	Learning and Discovery
	biomedical papers, team-based	designs, propensity score	
	case studies and practical	methodology, instrumental	
	sessions introducing the art of	variables, and methods for non-	
	collaborative statistics.	compliance in randomized	
	Corequisite(s): Introduction to	clinical trials.	
	Statistical Theory and	Prerequisite(s): Introduction to	
	Methods I, Applied	Statistical Theory and Methods	
	Biostatistical Methods I	I and Applied Biostatistical	
	*Introduction to Statistical	Methods I.	
	Theory and Methods II. This	*Statistical Genetics and	
	covers formal introduction to	Genetic Epidemiology. Topics	
	the basic theory and methods	from current and classical	
	of probability and statistics,	methods for assessing	
	including statistical inference,	familiality and heritability,	
	as well as classical and	linkage analysis of Mendelian	
	Bayesian methods, and	and complex traits, family-	
	statistical models for discrete,	based and population-based	
	continuous and categorical	association studies, genetic	
	outcomes. Core concepts are	heterogeneity, epistasis, and	
	mastered through	gene-environmental	
	mathematical exploration,	interactions. Computational	
	simulations, and linkage with	methods and applications in	

	the applied concepts studied in	current research areas. The	
	Applied Biostatistical Methods	course will include a simple	
	II.	overview of genetic data,	
	Prerequisite(s): Introduction to	terminology, and essential	
	Statistical Theory and	population genetic results.	
	Methods I or its equivalent	Topics will include sampling	
	Corequisite(s): Applied	designs in human genetics, gene	
	Biostatistical Methods II,	frequency estimation,	
	Introduction to the Practice of	segregation analysis, linkage	
	Biostatistics II	analysis, tests of association,	
	*Applied Biostatistical	and detection of errors in	
	Methods II. This course	genetic data.	
	provides an introduction to	Prerequisite(s): Introduction to	
	study design, descriptive	Statistical Theory and Methods	
	statistics, an analysis of	I and Introduction to Statistical	
	statistical models with	Theory and Methods II.	
	continuous, dichotomous and	*Biostatistics Career	
	survival outcomes, with one or	Preparation and Development	
	more predictor variables.	II . The purpose of this course is	
	Topics include mixed effects	to further develop the student's	
	models, likelihood and	job seeking ability and the	
	Bayesian estimation,	practical aspects of	
	generalized linear models	job/internship search or	
	(GLM) including binary,	interviewing for a PHD	
	multinomial and log-linear	program. The goal is to learn	
	models, basic models for	these skills once and use them	
	survival analysis and	for a lifetime. Modules that will	
	regression models for censored	be covered include:	
	survival data, clustered data,	Communication skills, written	
	and model assessment,	and oral, interviewing with	
	validation and prediction. Both	videotaped practice and review,	
	parametric and non-parametric	negotiating techniques,	
	techniques are explored. Core	potential career choices in the	
	concepts are mastered through	Biostatistics marketplace, and	
	team-based case study and	working on a team. This	
	analysis of authentic research	semester includes writing and	
	problems encountered by	interviewing practicum, and a	
	program faculty and	panel of relevant industry	
	demonstrated in practicum	speakers. Students will leave	
	experiences in concert with	this course with the knowledge	
	Introduction to the Practice of	to manage their careers now	
	Biostatistics II. Computational	and in the future.	
	exercises use the SAS and R		
	packages.		
	Prerequisite(s): Applied		
	Biostatistical Methods I or its		
	equivalent; linear and matrix		
	algebra		
	Corequisite(s): Introduction to		
	Statistical Theory and		
	Methods II, Introduction to the		
	Practice of Biostatistics II,		
	Introduction to Statistical		
	Programming II (SAS)		
	*Biostatistics Career		
	Preparation and		
	Development I. The purpose		
	of this course is to give the		
	student a holistic view of		

include an informational interviewing and networking practicum with invited guests. Students participate in a professional "etiquette dinner" and a "dress for success" module as well an employer panel. Corequisite(s): Introduction to Statistical Theory and Methods I through Introduction to the Practice of Biostatistics I Note: The course is taught based around three major areas of Business Management, Biotechnology & Molecular Biology and Bioprocessing, with focus on Manufacture of biochemicals, pharmaceuticals, devices and materials; Genetic engineering and the fundamentals of biotechnology; Business management, economics and finance; Marketing management; Commercialization of products, IP; Food, biotechnology and microbiological processing; Fuels and energy; Industries based on renewable and sustainable resources; Production technologies; Plant design and economic analysis; etc.	*Business Strategy *Accounting and Financial Management *Marketing Management *Entrepreneurship & Commercialization *Fundamental Principles of Drug Discovery (Optional) *E-business: Technology and Management (Optional)	*Biopharmaceutical Product & Clinical Development *Microbiomics & Metagenomics (Optional) *Environmental Protection, Risk Assessment and Safety (Optional) *Impact of Biotechnology on the Use of Natural Resources (Optional) *Chemotherapy of Infectious Diseases (Optional) *Vaccines and Gene Therapy (Optional) *Essentials of Medical Genomics (Optional) *Laboratory Skills (Optional)
design and economic analysis; etc. *The Fundamentals of Biotechnology *Molecular Biology and Genetic Engineering		(Optional) Dissertation
1 i AS Far ACSCIECE VE Fraerfro Fereise * E* C*-	nclude an informational nterviewing and networking practicum with invited guests. Students participate in a professional "etiquette dinner" and a "dress for success" nodule as well an employer panel. Corequisite(s): Introduction to Statistical Theory and Methods I through ntroduction to the Practice of Biostatistics I Note: The course is taught pased around three major areas of Business Management, Biotechnology & Molecular Biology and Bioprocessing, with focus on Manufacture of piochemicals, pharmaceuticals, devices and naterials; Genetic engineering and the fundamentals of piotechnology; Business nanagement, economics and inance; Marketing nanagement; Commercialization of products, IP; Food, piotechnology and nicrobiological processing; Fuels and energy; Industries pased on renewable and ustainable resources; Production technologies; Plant design and economic analysis; etc.	neture an informational nerviewing and networking practicum with invited guests. Students participate in a professional "etiquette dinner" and a "dress for success" nodule as well an employer basel around theory and Methods I through ntroduction to the Practice of Biostatistics I Note: The course is taught based around three major areas Biology and Bioprocessing, with focus on Manufacture of biotechnology & Molecular Biology and Bioprocessing, with focus on Manufacture of biotechnology; Business nanagement, economics and inance; Marketing management, conomics and inance; Marketing management; Commercialization of products, IP; Food, biotechnology and nicrobiological processing; Puels and energy; Industries based on renewable and ustainable resources; Production technology and Biotechnology 'Molecular Biology and Biochemical Engineering Biochemical Engineering

		*Bioproduct Plant Design and		
		Economic Analysis		
13	Creative &	*Introduction to the Creative	*Managing Museums and	*Music Management
	Cultural Industries	and Cultural Industries	Cultural Heritage Sites	Events
	Management	*Critical Theories and	*Fundraising Management:	
		Concepts in the Creative and	sponsorship, philanthropy and	
		Cultural Industries	the state	Dissertation
		*Cultural Marketing	*Managing Creative Brands	
		*Accounting and Financial	*Managing Festivals, Events	
		Management	and Creative Performances	
	<u></u>	*Research Methods	*Music Management Planning	
14	Clinical & Health	*Research Methods I:	*Research Methods II: Design	*Health and Society
	Psychology	Conducting Applied Research	and Analysis	*Professional Issues
		*Facilitating Change I	*Facilitating Change 2	*Health Behavior
		*Evidence-based	*Socio-cultural aspects of	Change (Optional)
		psychological interventions	health	*Illness & Health Care
		and therapies for mental and	*Advanced research	(Optional)
		physical health problems	methodology, encompassing	
		*Integrative theoretical	quantitative and qualitative	
		approaches to psychological	analytic techniques	Discontation
		shares		Dissertation
		*Developingloop of health and		
		illnoss		
		*Mind and Rody (Optional)		
15	Commerce	*Introduction to Consulting	*Marketing and Quantitative	*Marketing and
15	Commerce	and Advisory Thinking	Analysis	Management
		*Global Strategy and Systems	*Organizational Behavior and	*E-Business
		*Strategic Cost Management	Communication	*Global Immersion
		*Financial Accounting	*Business Analytics	Experience (GIE
		*Human Resource	*Accounting and Finance	Abroad)
		Management	*Project Management	101000)
		in an agement	r ogeet tranagement	Dissertation
16	Communication	*Innovation by design	*Access and transport networks	*Information Security
	Technology	thinking	*Network and service	*Dependability and
		*Fundamentals of Micro- and	management	Performance Design
		Nanotechnology	*Internet network architecture	*Advanced software
		*Concepts and Theory of	*HF and RF Engineering	design
		Compound Semiconductor		*Advanced CAD,
		Photonics		Fabrication and Test
		*Software Tools and		
		Simulation		Dissertation
		*Advanced Communication		
L		Systems		
17	Computer Science	*Automated Reasoning and	*Designing for Parallelism and	*Computer Vision
		Verification	Future Multi-core Computing	(Optional)
		*Modeling Data on the Web	*Data Engineering	*Cryptography
		*Principles of Digital Biology	*Modeling and Visualization of	(Optional)
		*Introduction to Health	High-Dimensional Data	*Component-based
		Informatics	*Mobile and Energy Efficient	Software Development
		*Parallel Programs and their	Systems	(Optional)
		Performance	*Mobile Communications	*Pattern-Based Software
		*IT Governance (Optional)	*Cyber Security (Optional)	Development (Optional)
		*Foundations of Machine	*Software Engineering	*Querying Data on the
		Learning (Optional)	Concepts in Practice (Optional)	web (Optional)
		* Text Mining (Optional)		*Agile and Test-Driven
		"Ontology Engineering for the		Development (Optional)
		Semantic Web (Optional)		Discussion
				Dissertation

18	Conservation Biology	*Multidisciplinary Perspectives on Conservation *Population and Evolutionary Biology *Analytical Methods for Ecologists *Research Skills for Natural Sciences *Ecotourism and Rural	*Economics of Biodiversity Conservation *Advanced Topics in Primate Behavior *Conservation and Community Development *Integrated Species Conservation and Management *Environmental Policy and	*Managing Protected Areas *Principles of Geographic Information Systems (GIS) and Remote Sensing *International Wildlife Trade - Achieving Sustainability
		Development (Optional) *Conservation Biology in Principle and Practice *Tropical Conservation Biology (Optional)	Law (Optional) *Environmental Pollution Management Strategies (Optional)	*Research Methods for Social Science (Optional) *Environmental Impact Assessment (Optional) *Habitat Management (Optional)
19	Data Science	*Machine Learning and	*Machine Learning and	Dissertation
17		Statistics I *Understanding Databases *Data Husbandry *Professional Skills and Practice *Applications in Data Science	Statistics II *Applied Urban Analytics *Computer Science Data Informatics *Management and Business *Social Analytics	Dissertation
20	Public Health	*Fundamentals of Epidemiology *Evidence Synthesis: Systematic Reviews *Guideline Development and Implementation *Oral Health & Disease in Populations *Implementing Strategy in Dental Services *Global Women's Public Health (Optional) *Primary Health Care *Qualitative Research Methods *Emergency Planning, Response & Resilience *Implementation Sciences *Health Services Management (Optional) *Intercultural Public Health (Optional)	*Emergency Humanitarian Assistance *Health Promotion Theory & Methods *Promoting Health and Wellbeing in Practice *Working with Communities *Health Economics *Impact, Information and Evaluation (Optional) US Leadership and Public Health Strategy (Optional)	*Advanced Epidemiology *Practical Statistics for Population Health (formerly Biostatistics) *Communicable Disease Control *Health Systems Challenges in Low and Middle Income Countries *Global Health in the 21st Century Dissertation
21	Development Studies	*Understanding Economic Migration: Theories, Patterns and Policies *Economics of inequality and deprivation *Forced migration and development *Aid and development *Basic econometrics	*Behavioral economics: theory and applications *Environmental economics * Economic Perspectives on Development *Marxist Political Economy and Global Development * Power and Social Perspectives on Development (Optional)	*Financial institutions and markets in developing countries *Neoliberalism, Democracy and Global Development *Gender, Identity and Inclusion (Optional) *Political Economy Perspectives on Development (Optional) *Climate Change and

				Development (Optional)
				Dissertation
22	Digital Curation	*Concepts and Theories of	*Web Publishing	*Studies in Management
		Digital Curation	*Archive Services Management	(Optional)
		*Digital Curation	*Compliance Law and Ethics	
		Technologies and System	*Information Organization and	
		Development	Retrieval	Dissertation
		*Archives Collection	*Knowledge and Information	
		Development and Description	Architecture	
		*Digital Preservation		
		*Research Data Management		
23	Digital Marketing	*Digital Production Tools And	*Digital Business Models	*Emerging Trends in
		Techniques	*Data Analytics and Market	Digital Technology
		*Digital Public Relations	Research	*Digital Marketing
		*Methods, Metrics And	*Marketing in the Digital	Implementation
		Analytics	Context	*Digital Marketing
		*Emerging Trends in Digital	*Ethical Business for Digital	Strategy
		Technology	Marketing	*Digital Business
		*Social Media Marketing	*E-Commerce (Optional)	Models
		(Optional)	*Marketing in the Digital	*Marketing
		*Advertising and Persuasion	Context (Optional)	Management (Optional)
		Strategies (Optional)		*Brand Management
				(Optional)
				Dissertation
24	Economics	*Mathematical Methods in	*Applied Macroeconometrics	*Mathematical
		Economic Analysis	*Development Microeconomics	Economics
		*Microeconomic Theory	*Cross Section Econometrics	*Economic Growth
		*Macroeconomic Theory	*Macroeconomic Theory and	(Optional)
		*Introduction to Quantitative	Policy	*Natural Resource
		Methods in Economics	*Public Economics	Economics (Optional)
		*Econometric Methods	*Poverty, Inequality and	*Financial Economics
		*Financial Econometrics	Government Policy in Less	(Optional)
		*Mathematical Finance	Developed Countries (Optional)	
		*Non-Market Valuation		
		*Topics in Economics of		Dissertation
		Health		
		*Political Economics		
		*Econometric Theory		
		*Applied Development		
27		Economics Project (ADEP)		
25	Energy	*Smart Grids & Sustainable	*Understanding Energy as a	Term Paper: Energy
	Management	Electricity Systems	system driving modern society	Alternatives & Prospects
		* Lechniques for Research and	*Solar Energy Technologies	
		Industry	"Zero Carbon Built	Dissoutotie
		"Introduction to Power	Intrastructure	Dissertation
		Systems	* Marine Energy: Wind, Wave	
		sustema	\propto 110al	
26	Entropropostio	*Innovation and the	*Pagional National and Clabal	*Innovation & Markat
20	Management	Knowledge Economy	Dimonsions of Science	Strategy
	wanagement	*Innovation Management	Technology and Innevation	*Business Creation and
		*High Technology	(Optional)	Development
		Entrepreneurship	*Eco Innovation Management	*Developing
		*Financial Appraisal and	*Water and Sonitation Dianning	Enterprising Individuals
		Invostment Economice	and Policy in developing	(Ontional)
		*Pessarch Mathada	and Policy in developing	(Optional)
		· Research Methous	countries (Optional)	

		*Service Innovation *Case Studies in Technology Strategy & Innovation Management		Dissertation
27	Human Resource Management	*Human Resource Development: Key Concepts *Human Resource Development & Leadership *Organization Development *Industrial Competitiveness and Global Transformation *Education Leadership (Optional) *Leading Educational Change and Development (Optional) *Educating for Sustainability (Optional) *Work and Employment in the Global Economy *The Politics and Governance of Development (Optional)	*Organizational Change Strategies *Gender & Development *HRD and Research in an International Context *International Perspectives on Equity and Diversity in Education *Development Practice: International Contexts and Worlds of Action (Optional)	*Civil Society & Public Action (Optional) *Learning, Training and Development (Optional) Dissertation
28	Informatics (Health)	*Placing Electronic Records at the Centre of Care *Evidence-based Practice and Health Care Information *The Internet, Web and E- Health *Information and Knowledge Management *Information Systems in Health	*Introduction to Health Informatics *Introduction to Telehealth and Telecare *Public Health; Informatics Leadership, Strategy and Change *Analysis of Health Information	Dissertation
29	Information & Library Studies	*Libraries, Information and Society *Information Literacy *Leadership, Strategy and Change *Information Retrieval: Search Engines and Digital Libraries *Information and Knowledge Management	*Personal and Professional Development Portfolio *Public and Youth Library Services *Academic and Workplace Library, Information and Knowledge Services *Information Governance and Ethics *Database Design and Data Management	Dissertation
30	Information Management	*IS Strategy & Enterprise Systems *Information and Knowledge Management *Data Engineering *IT Governance	*Foundations of Machine Learning *Data Analytics for Business Decision Making *Simulation & Risk Analysis *Text Mining	Dissertation
31	Information Technology	*Informatics Research Methods *Algorithms and data structures *Database Design & Development *Human computer interaction: design and evaluation *Programming	*Systems and networks *Cyber security fundamentals *Process Oriented Requirements Engineering *Web Systems *Usability Engineering (Optional) *Cyber security forensics (Optional)	*Data Mining and Exploration *Digitization *Enterprise cyber security *Cryptography and secure development *Internet technology (Optional) Dissertation

32	Information	*Oil and Gas Exploration	*O-O programming for Oil and	*Intranet Systems
	Technology for the	*Networking and Computer	Gas	Development (Optional)
	Oil & Gas Industry	Technology	*Software Development and	*Oil and Gas Contracts
		*Data management	Database Systems	and Disputes (Optional)
		*Data Visualization and	*Web Systems Development &	
		Analysis	Interaction Design	
		*Petroleum Geoscience	*Environmental Regulation and	
			State Control of Oil and Gas	Dissertation
33	Information	*Research Methods	*Database & Web Systems	*Managing Virtualized
	Technology	*Fundamentals of Quantitative	Development	and Cloud Systems
	Management	Analysis	*Information Retrieval	*Management
		*Machine Learning for Data	*Information Systems and	Enterprise Resources
		Analytics	Security	Planning (ERP) Systems
		*Information Systems	*Information Technology	(Optional)
		Architecture	Auditing and Assurance	*Ethical Considerations
		*Business Analysis	*Business Continuity and	in Managing
			Disaster Recovery	Information Technology
			*Information Law (Optional)	(Optional)
				Dissertation
34	Information	*Business Data	*Quantitative Methods for	*Electronic Health
	Technology with	Communication and Networks	Information Systems	Records (Optional)
	Business	*Database Design and	*Network Security	*Server-Side Web
	Intelligence	Implementation for Business	*Database Management	Development (Optional)
		*Information Systems	*Business Continuity and	*Health Informatics
		Analysis and Design	Disaster Recovery	(Optional)
		*Software Quality, Testing,	*Web Analytics and Mining	*Web Application
		and Security Management	(Optional)	Development (Optional)
		*Information Structures with		
		Lava and Puthon		
		*Biomedical Sciences and		Dissertation
25	Information	*Biomedical Sciences and Health IT (Optional)	*Deteksor ord Web Security	Dissertation
35	Information	*Biomedical Sciences and Health IT (Optional) *Information and Security	*Database and Web Security	Dissertation *Business Continuity
35	Information Technology with	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infractructure and Service	*Database and Web Security *Intranet Systems Development	Dissertation *Business Continuity and Disaster Recovery
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and	Dissertation *Business Continuity and Disaster Recovery
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and	Dissertation *Business Continuity and Disaster Recovery
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and	Dissertation *Business Continuity and Disaster Recovery Dissertation
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations	Dissertation *Business Continuity and Disaster Recovery Dissertation
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations	Dissertation *Business Continuity and Disaster Recovery Dissertation
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations	Dissertation *Business Continuity and Disaster Recovery Dissertation
35	Information Technology with Cyber Security	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations	Dissertation *Business Continuity and Disaster Recovery Dissertation
35	Information Technology with Cyber Security Information	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network
35	Information Technology with Cyber Security Information Technology with	*Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture
35	Information Technology with Cyber Security Information Technology with Network	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture
35	Information Technology with Cyber Security Information Technology with Network Management	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture
35	Information Technology with Cyber Security Information Technology with Network Management	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation
35	Information Technology with Cyber Security Information Technology with Network Management	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation
35	Information Technology with Cyber Security Information Technology with Network Management	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation
35	Information Technology with Cyber Security Information Technology with Network Management	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service	*Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation
35	Information Technology with Cyber Security Information Technology with Network Management	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International	*Biomedical Sciences and +Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management International Business	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings:
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International Business, with	 *Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management International Business *Theories of International 	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business *Comparative Business and 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings: Comparative Cultures of
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International Business, with International	 *Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management *Information Technology Infrastructure and Service Management International Business *Theories of International Business 	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business *Comparative Business and Management (Optional)	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings: Comparative Cultures of Diaspora (Optional)
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International Business, with International Communication	 *Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management Informational Business *Theories of International Business *Research Methods and Data 	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business *Comparative Business and Management (Optional) *International Business 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings: Comparative Cultures of Diaspora (Optional) *Translating for
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International Business, with International Communication	 *Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management Informational Business *Theories of International Business *Research Methods and Data Analysis in International and 	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business *Comparative Business and Management (Optional) *International Business 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings: Comparative Cultures of Diaspora (Optional) *Translating for International
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International Business, with International Communication	 *Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management International Business *Theories of International Business *Research Methods and Data Analysis in International and Comparative Business 	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business *Comparative Business and Management (Optional) *International Business Strategy *Responsible Business in a 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings: Comparative Cultures of Diaspora (Optional) *Translating for International Organizations (Optional)
35 36 37	Information Technology with Cyber Security Information Technology with Network Management International Business, with International Communication	 *Biomedical Sciences and Health IT (Optional) *Information and Security Management *IT Infrastructure and Service Management *Object Oriented Programming *Data Management *Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Information Technology Security Policies and Procedures *Systems and networks *Network Routing and Switching *Object Oriented Programming *Data Management *Information Technology Infrastructure and Service Management Infernational Business *Theories of International Business *Research Methods and Data Analysis in International and Comparative Business *Frontiers of International 	 *Database and Web Security *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis *Digital Forensics and Investigations *Wireless Networking *Intranet Systems Development *Software Project Engineering *Data Visualization and Analysis International Business *Comparative Business and Management (Optional) *International Business Strategy *Responsible Business in a Global Environment 	Dissertation *Business Continuity and Disaster Recovery Dissertation *Internet network architecture Dissertation *Border-Crossings: Comparative Cultures of Diaspora (Optional) *Translating for International Organizations (Optional) *Topics in International

		 *Marketing Issues In International Business (Optional) *International Trade : Theory, Policy & Practice (Optional) *International Business Negotiations (Optional) *Advanced Research Methods and Data Collection in International Business (Optional) *Managing Across Cultures (Optional) *International Entrepreneurship (Optional) *International Business & Emerging Markets (Optional) *International Communication *Language and identity in multicultural spaces *Memory, Mediation & Intercultural Relations *Introduction to Intercultural Communication (Optional) *Explorations in Intercultural Thinking *Developing Researcher Competence in Intercultural Communication 	Finance (Optional) *Multinationals and Technology Transfer in Economic Development (Optional) International Communication *English as a Global Language *Pragmatics: Meaning, Context, and Interaction *Language and Mediality: From Sand Drawings to Twitter *International Perspectives on Equity and Diversity in Education (Optional) *Intercultural Engagement at Work and in Communities (Optional) *Translation and Interpreting Studies I (Optional)	*Postcolonial Literatures, Genres and Theories (Optional) *Humanitarianism and Conflict Response: Inquiries (Optional) *Foreign Language Learning for Intercultural Competence (Optional) Dissertation
38	International Business, with International Relations	*Theories of International Business *Research Methods and Data Analysis in International and Comparative Business *Frontiers of International Business and Management *International Trade : Theory, Policy & Practice *Multinational Business Finance (Optional) *International Business Negotiations (Optional) *Responsible Business in a Global Environment (Optional)	*Power and Resistance in Postcolonial Societies *International Business Strategy *Marketing Issues In International Business (Optional) *Multinationals and Technology Transfer in Economic Development *International Entrepreneurship (Optional) *International Business & Emerging Markets (Optional)	 * Human Rights in World Politics *Ethics in World Politics *Foreign Policy Analysis *Advanced Research Methods and Data Collection in International Business (Optional) *Managing Across Cultures (Optional)
39	International Marketing Management	*Marketing Theory and Practice *Marketing Strategy and Planning *International Business Management *Consumer Behavior across Cultures *Marketing Communications *E-Business (Optional) *International Fashion Marketing and Luxury	*Direct, Digital and Interactive Marketing *Applied Marketing Research *Accounting and Finance for Business *Marketing Management *Corporate Communications *Research Methods for Social Sciences (Optional)	*International Services Marketing *Business to Business Marketing *Brand Management (Optional) *Professional Skills and Employability (Optional) Dissertation

		Branding (Optional) *Corporate Social Responsibility and Sustainability (Optional)		
40	International Public Diplomacy	*Public diplomacy – concepts and methods *Public diplomacy in building bilateral relations *Building the national brand with public diplomacy *Public diplomacy Limitations	*Public diplomacy in the information age *Public diplomacy in international organizations *Public diplomacy in the postmodern world *Measuring Public Diplomacy Impact	Dissertation
41	International Relations	*Critical Thinkers in International Politics *Research Design *Ethics in World Politics *Security Studies *Critical Approaches to IPE *The Arab Uprisings and Revolutionary State Formation *Critical Globalization Studies	*Media, War and Conflict *Debating Justice *Theories of Rights *Human Rights in World Politics *The United Nations and International Security *Power and Resistance in Postcolonial Societies	*EU as an International Actor *Foreign Policy Analysis Note: *Seminar in International Relation Theory Dissertation
42	International Security Studies	*Research Design in the Social Sciences *Strategic Nonviolent Conflict *Terrorism and Counterterrorism *Transnational Organized Crime and National Security *Dynamics of Civil Wars *Democracy and Peace (Optional) *Russian & American Foreign Policies in Contrast (Optional) Note: Case Study Analysis of the Cold War; Congressional- Executive clashes over foreign policy control; approaches to policy analysis	*International Peace and Security *Violent and Non-Violent Conflicts *Introduction to Qualitative and Quantitative Methods *Conflict Resolution and Post- War Development *War and International Law *Global Political Economy (Optional) *European Politics and Society (Optional)	Dissertation*Security: TheEvolution of a Concept* Rebellion and ArmedConflict*Intelligence and USNational Security*Emerging Powers inthe Global System*Mexican NationalSecurity*International Relationsof Sub-Saharan Africa(Optional)*Politics of Islamism(Optional)*Issues in Cybersecurityand Cyberwar*Gender as aComponent ofInternational Security(Optional)*International Politics ofthe Middle EastDissertation
43	Laboratory Quality Analysis & Management	*Introductory Statistics *Analysis and Measurement *Work, Organization and Management *Medicinal Chemistry *Microbiology and Molecular Biology *Managing Customer Relationships (Optional)	*Applied Statistics *Entrepreneurship in Business *Analytical Measurement Uncertainty and Method Validation *Laboratory Quality Systems *Functional Proteomics *Intercultural Communication (Optional)	*Project and Risk Management *Advanced Medicinal Chemistry *Statistical Methods in Bioinformatics *Safety and Quality in Hospital Care *Managing Cultural Diversity (Optional) Dissertation

44	Logistics & Supply	*Global Operations	*Simulation & Risk Analysis	*Supply Chain Logistics
	Chain	Management	*Business to Business	Management
	Management	*Strategic Supply Chain	Marketing	*Modeling Operations
	0	Management	*Business Improvement Tools.	Processes
		*Research Methods	Techniques and Systems	*Sustainable Supply
		*Managing Projects	*Global Supply Chain	Chain Management
		*Data Analytics for Rusiness	Management: Theories and	Chain Management
		Data Analytics for Busiliess	Dreation	
		*One mating	*Manual Landard	D:
		*Operational Excellence: The	*Megaproject Leadership and	Dissertation
		Toyota Production System	Strategy	
45	Management &	*Analyzing Companies	*International Human Resource	*Configuration of
	Business	*Organizational Design &	Management	Companies for
	Administration	Strategy: International	*The Political Economy of	Capability Building
		Contexts	Global Business	(Optional)
		*Comparative and Global	*The Management of	*Managing
		Management	International Organizational	Organizations for
		*Business Models: Theory and	Change	Growth (Optional)
		Practice	*Strategy Formulation	
		*Research Design and	*Business Environment and	
		Methods	Strategy in China	Dissertation
		*Digital Technologies,	*Asian Business and	
		Development and Emerging	Comparative Management	
		Markets (Optional)	(Optional)	
46	Marine Science &	*Research Skills and	*Current Research in Marine	*Practical Skills in
10	Management	Statistical Methods	Conservation	Marine Surveying
	Wanagement	*Fisheries Ecology and	*Environmental Impact	*Applied Research
		Management	Assessment	Design & Analysis
		*Oceanography and Marine	*Marine Ecotoxicology	*Marine Biotechnology
		Follow	*Diadiversity Conservation and	*Marine Environmental
		*Occup and Cocctol Science	Protected A reas	Monitoring (Ontional)
		*Ocean and Coastal Science	Protected Areas	*Environment of Dollars
		*Marine Resources and	*Climate Change: Mitigation	*Environmental Policy
			and Adaptation Measures	& Risk (Optional)
		*Spatial Analysis (Optional)		D
		*GIS for Marine and		Dissertation
		Environmental Scientists		
		(Optional)		
47	Occupational	Module 1	Module 4	Module 7
	Health & Safety	Occupational Health in	Management; Professional	Epidemiology and
	Management	Perspective; Introduction to	Behavior/Leadership and	Statistics; Life Long
		Occupational Health Law;	Teamwork; Communication;	Learning; Evidence
		Introduction to	Clinical Governance; Practical	Based Practice; Critical
		Communication; Ethical	Applications in Quality and	Appraisal; Social
		Considerations in Practice;	Audit; Standard Setting;	Research Methods;
		Introduction to Toxicology;	Business Needs in the Provision	Information Technology
		Introduction to Occupational	of an Occupational Health	
		Hygiene; Introduction to	Service	Module 8
		Lighting; Introduction to		Industry and
		Temperature and Work;	Module 5	Environment;
		Introduction to Noise and	Noise; Vibration; Radiation;	Occupational Hygiene
		Vibration; Introduction to	Compressed Air Work and	Practice; Food Safetv
		Hazardous Substances	Commercial Diving:	and Hygiene: Prevention
			Temperature and Work: Light	of Accidents: Principles
		Module 2	and Vision	of Toxicology
		Recognizing Occupational		*Occupational Health in
		Disease: Introduction to	Module 6	a Global Market
		Occupational Dermatology	Respiratory Disorders	
		Introduction to	Occupational Dermatosas	
		Musculoskalatal Disordars:	Musculoskalatal Disordors	Dissortation
		Introduction to the Despirate	Aviational Concorrer Aviation	D15501 (at1011
1		introduction to the Respiratory	Occupational Cancers; Aviation	

		System; Introduction to Occupational Infections; Mental III Health and Stress at Work; Introduction to Epidemiology; Health Assessment, Surveillance and Screening; Sickness Absence; Disability Assessment Module 3 Workplace and Clinical Assessment Skills: the Portfolio; Advanced Occupational Health Law; Health Promotion; Ageing and Employment; Ergonomics; Shift Work and Daily Rhythms; Rehabilitation and Return to Work; Choosing a Research Topic and Literature Review; Developing the Research Question; Common Mental Health Problems and the Workplace; Introduction to Audit	Medicine; Occupational Infections; Medically Unexplained Symptoms	
48	Oil Rig & Gas Facilities Management	*Introduction to Oil and Gas Industry *Petroleum Fundamentals and Exploration *Reservoir Characterization *Reservoir Engineering and Simulation *Well Engineering	*Petroleum contracts and economics *Impacts of Petroleum Exploration, Extraction and Transportation *Materials & Corrosion *HSE Management in the Oil and Gas Industry *Energy Economics Management and Risk Analysis	*Unconventional Resources *International Environmental Law Dissertation
49	Organizational Psychology	*Research Methods 1 *Psychological Assessment at Work *Learning, Training and Development *Well-Being and Work *Work Design, Organizational Change and Development *Research Design, Advanced Data Gathering and Analytical Techniques *Training, Support and Development (Optional)	*Research Methods 2 *Managing People and Organizations *Work Design, Performance & Wellbeing *Test User: Occupational - Ability and Personality *Relationships at Work	*Applying Psychology to Work and Organizations *Selection and Assessment in Organizations *Leadership, Engagement and Motivation Dissertation
50	Petroleum Technology Management	*Reservoir Engineering Fundamentals *Basin Analysis *Exploration Group Project *Independent Research Project *Fundamentals of Petroleum Geoscience	*Prospect Evaluation and Petroleum Economics *Development Group Project *Field Appraisal and Development *Play Fairway Analysis *Communication Skills and Fieldwork	*Health, Safety & Environment *Field Depletion Planning *Key Interpretation Skills Dissertation
51	Project Management	*Introduction to Project Management *Integration Management,	*Project Contract, Commercial and Procurement Management *Project Scope and Quality	* Econometric Methods *Health, Safety & Environment

		Integrated Master Scheduling,	Management	
		and Governance	*People, Organization and	
		*Project Planning and	Culture	Dissertation
		Resource Management	*Managing Research Projects	
		*Project Cost, Risk and		
		Benefits Management		
		*Ouality Assurance & Control		
52	Psychology	*Research skills	*Learning, Training and	
0-	1 5 9 011010 8 9	*Advance Statistics (e.g. path	Development	
		analysis meta-analysis linear	*Work Design Organizational	
		and non-linear regression)	Change and Development	
		*Qualitative Research	*Statistical Methods for	Dissertation
		Methods (e.g. Grounded	Occupational Psychologists	
		theory discourse analysis)	*Research Methods for	
		*Practical Issues in	Occupational Psychologists	
		Psychological Research (e.g.	*Mind and Body	
		working with children RCTs)	Wind and Body	
		*A dyangad Ganaral Mathada		
		in Psychology (a g avperience		
		appling ave treaking)		
52	Safety Science	*Introduction to	*SHE Disks	
55	(Specialization)	Environmental Science	*Drinciples of Ergonomics	
	(Specialization)	*Descriptive Statistics	*Assessment of Workplace	
		*Descriptive Statistics *Descriptive Statistics	Environment	Discortation
		*Safety Risk Management	*SSHE Laws	Dissertation
		*Occupational Health and	SSTIL Laws	
		Safety		
54	Security	*Principles and Theories of	*Security Management	*Homeland Security
54	Management &	Security Management	Concepts	Principles and Practices
	Operations	*Framework of Corporate	*Cyber-Security and	(Optional)
	operations	Security	Information Protection	*Terrorism and
		*Critical Infrastructure	*Security Programs Evaluation	Homeland Defense
		Analysis and Strategies	*Vulnerability Assessment and	Fundamentals (Optional)
		*Emergency Preparedness and	Risk Analysis	
		Management		
		*Fundamentals Of		Dissertation
		Management		
55	Social	*Foundations of Research	*Law for Social Work Practice	
	Entrepreneurship	*Identifying Social	*Social Business Models	
	1 1	Entrepreneurship	*The Impact of Social	
		Opportunities	Enterprise	Dissertation
		*Planning for Social	*Funding for Social Enterprise	
		Innovation	* Project Cost, Risk and	
		*Customer Care Professional	Benefits Management	
		* Project Scope and Quality		
		Management		
		*Sociology of Institutions and		
		Organizations		
56	Social Work	*Foundations of Research	*Law for Social Work Practice	Hands-on experiences:
		*Safeguarding Children,	*The Life Course and Social	*10 working days of
		Adults and their Families	Relationships	professional skills
		*Social Work Interventions	*Practice Learning and	development;
		with Vulnerable Adults,	Professional Development	*100-day placement
		Families, Children and Young	*Social, Political and	
		People	Organizational Context for	
		*Introduction to Social Work	Social Work Practice	
		*Customer Care Professional		Dissertation
		Term Paper: This provides an		

57	Sustainable Development	opportunity for you to undertake in-depth study on a social work-related topic or aspect of practice. *Trans-disciplinary Methods for Sustainability Science *Perspectives on Sustainable Development *Project Design and Grantsmanship *Statistical Modeling *Introduction to Energy Policy and Sustainability *Themes in	*Nature, Health and Wellbeing *Environmental Science and Population Health *Global Policy Challenges *Environmental Knowledge *Governing Sustainability	*Environmental Impacts Assessment (Optional) *Health, Safety & Environment (Optional) Dissertation
58	Sustainable Tourism Management	 *Managing Visitor Attractions (The development and redevelopment of cultural and heritage attractions- Sustainable heritage management) *Business Strategy & Finance *Tourism Planning & Development *The Tourism & Hospitality Industries *Destinations (Contexts for Tourism & Hospitality) *Air Transport & Tourism (Optional) *Sport Tourism (Optional) *Tourism & the Media (Optional) Term Paper on Conference Tourism: Here, you will reflect on the conference sector's growth, and examine its present state by identifying the size, value, trends and growth of major conference destinations throughout the world. You will also suggest how destinations and venues can develop a better conference product. 	*Crisis & Disaster Management *Design for Tourism & Hospitality (design of tangible and intangible objects or 'things' such as buildings (exteriors and interiors), maps and guides, souvenirs, live events, corporate identities, business processes, and servicescapes. *Tourism sustainability and climate change *Food Design & Marketing *Global Food & Drink (Optional) *Tourism Culture & Society (Optional) *Tourism Management & the Natural Environment (Optional)	Note: Optional work placement: This is intended to foster personal and professional development for a connection between academic learning and the working world. How will management theories be used for industry improvement? The transferable skills developed will improve your performance in your future career, both as employee and manager. Dissertation
59	Tourism & Hospitality Management	*Critical Perspectives in Tourism Management *Customer Care Professional *Managing Resources in Hospitality and Tourism *Spares and Materials Management *Contemporary Issues in Cruise Management (Optional) *Travel and Visual Culture Consultancy (Optional) *Fundamentals of asset management	*Turnaround Management *Preventive, Predictive, Reactive and Proactive Maintenance *Asset Management & Maintenance Strategies *International Hospitality Development *Human Resource Strategy in Multi Unit Service Organizations	*Operations Globalization, Society and Culture *Ethical and Social Responsibility: Theory and Application (Optional) Dissertation

Note: These subject combinations may be varied anytime, at the discretion of the University, as changes demand

Dissertation: This is an opportunity to study a subject in-depth, showing that the student properly understands it, after adequate teachings about research methods. The dissertation, which will be 15,000 words (or more), is a conclusion of the learning experience, where the student will carry out a research project, using an appropriate research methodology to collect and analyze data and present the findings.