



ACADEMIC CITY
UNIVERSITY

Academic Catalogue



2024/25
Academic Year

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1.0. Welcome Message

Dear Students, Faculty, and Esteemed Members of the Academic Community,

I am pleased to present you with the Academic Catalogue of Academic City University, ACity, for the 2024/25 academic year. This catalogue serves as a comprehensive guide to the diverse range of programs and courses available at our esteemed institution.

At ACity, we foster an inclusive and dynamic learning environment that nurtures critical thinking, creativity, and intellectual growth. Our faculty members are passionate facilitators of learning, innovators and researchers, who strive to inspire and mentor students, equipping them with the skills and knowledge necessary to thrive in an ever-evolving global landscape.

As you explore this catalogue, you will discover a wealth of academic offerings across our three faculties: Engineering, Computational Science and Informatics, and Business Administration and Communications Arts. Each program has been thoughtfully designed to empower you to pursue your passions and achieve your aspirations. We encourage you to fully utilise the resources and support available as you embark on this exciting discovery and personal development journey.

As a vibrant campus beaming with teaching, learning, research, and innovation in STEAM, we pride ourselves on our transdisciplinary approach to our activities while making every space on campus a space for great minds and talents to be stimulated. Together, we are shaping the leaders of tomorrow, driven by a shared commitment to excellence and social responsibility.

Welcome to Academic City University, where we prepare you to be #FutureReady!

Go #MakeYourMark!

Warm regards,

Prof Fred McBagonluri

President & Provost

2.0 Academic Calendar

2.1. Academic Year Overview

At ACity, we run three academic semesters in the year, even though the academic year spans two semesters. The third semester provides room for the second cohort of the first-year students to complete their fresh(wo)man year so they can join their year mates in the first cohort who joined in September, into their second year as one complete cohort. It is also a time for students who have to resit specific classes to register for paid refresher sessions with their academic departments, and subsequently sign up to write their resits. It also gives the University an opportunity to run some universal courses for interested students to express interest to their departments so that they can have a reduced load during the regular academic year.

Each semester has 12 teaching weeks. The table below shows the start and end dates of each semester:

Semester	Semester Start Date	Semester End Date
Semester One	09 - September - 2024	20 - December - 2024
Semester Two	13 - January - 2025	25- April - 2025
Semester Three	12 - May - 2025	22 - August - 2025

Note that, classes begin on the dates indicated, which means that students are expected to be on campus on the day for the first day of classes. Students who fail to do so will be held accountable.

2.2. Detailed Academic Calendar

The table below provides the detailed academic calendar for the 2024/2025 Academic Year, as is published on the [ACity website](#). Should there be a discrepancy between what is on the website and in this Catalogue, the copy online will take precedence.

2.2.1. Semester Schedule

Activity/Event	Semester	Date	Notes
Student Registration			
L100CH1/ L200/L300 & L400	One	2 Sept – 20 Sept 24	New entrants will start their registration on the 2 nd . Continuing students will be expected to commence on the 4 th .

Activity/Event	Semester	Date	Notes
	Two	13 Jan - 24 Jan 25	Continuing students will be expected to commence on the 15th. All will end on the same date.
100 CH 2	One	13 Jan - 24 Jan 25	
	Two	12 May - 23 May 25	
Matriculation (CH1 & 2)		21-Feb-25	
Class Starts			
L100CH1/ L200/L300 & L400	One	9-Sep-24	
	Two	20-Jan-25	
100 CH 2	One	20-Jan-25	
	Two	19-May-25	
Mid Semester Assessment Week			
L100CH1/ L200/L300 & L400	One	21 – 25 Oct 24	
	Two	26 Feb – 4 Mar 25	
100 CH 2	One	26 Feb – 4 Mar 25	
	Two	30 June – 4 July 25	
Mid Semester Break			
L100CH1/ L200/L300 & L400	One	28 - 29 Oct 24	Mon & Tue
	Two	5 - 7 Mar 25	Wed & Fri
100 CH 2	One	5 - 7 Mar 25	Wed & Fri
	Two	7-8 July 25	Mon & Tue
Revision (Reading) period			
L100CH1/ L200/L300 & L400	One	6 - 10 Dec 24	
	Two	19 - 22 Apr 25	

Activity/Event	Semester	Date	Notes
100 CH 2	One	19 - 22 Apr 25	
	Two	9 - 12 Aug 25	
End of Semester Examinations			
L100CH1/ L200/L300 & L400	One	11 – 20 Dec 24	
	Two	23 Apr - 5 May 25	
100 CH 2	One	23 Apr - 5 May 25	
	Two	13 - 22 Aug 25	

2.2.2. Grade Publication Deadlines

Grades will be published on ACity 2.0 and shared with parents/ guardians by these dates for each semester stated.

Activity/Event	Semester	Date	Notes
L100CH1/ L200/L300 & L400	One	7-Jan-25	
	Two	19-May-25	
100 CH 2	One	19-May-25	
	Two	1-Sep-25	

2.2.3. Re-Sit Periods

All students who have failed or missed grades should ensure to speak to their Heads of Department at least two clear months to the re-sit period stated below to discuss their interest and for approval from the Head of Department to proceed to register for the paper. This will ensure that the paper is added to the exam moderation process. Failing this, the student cannot re-sit this paper. For students who will need refresher courses, the Head of Department to engage the right faculty member to support the student to prepare for the exam at a fee.

Activity/Event	Semester	Date	Notes
Exams	One	11 – 20 Dec 24	

Activity/Event	Semester	Date	Notes
Exams	Two	23 Apr - 5 May 25	
Exams	Three	13 - 22 Aug 25	

2.2.4. Student Breaks

Activity/Event	Semester	Date	Notes
L100CH1/ L200/L300 & L400	One	23 Dec - 3 Jan 25	Christmas Break
	Two	6 May - 5 Sept 25	Summer Break
100 CH 2	One	6 May - 11 May 25	Semester Break
	Two	23 Aug - 5 Sept 25	Semester Break

2.2.5. Graduation-related Activities

Activity/Event	Semester	Date	Notes
Coffee Chat		6 May - 9 May 25	Students to be notified of confirmed date via email
Graduation Ceremony		7-Jun-25	

2.2.7. Commemorative Days

These days, though are marked to commemorate important events in Ghana's history as a nation, they are not observed as public holidays.

Day	2024		2025	
	Date	Day	Date	Day
African Union Day	25th May	Saturday	25th May	Sunday
Republic Day	1st July	Monday	1st July	Tuesday

2.2.6. Public Holidays in Ghana

The following days mark dates that are observed as public holidays in Ghana.

Holiday	2024		2025	
	Date	Day	Date	Day
New Year's Day	1st January	Monday	1st January	Wednesday
Constitution Day	7th January	Sunday	7th January	Tuesday
Independence Day	6th March	Wednesday	6th March	Thursday
Good Friday	29th March	Friday	18th April	Friday
Easter Monday	1st April	Monday	21st April	Monday
May Day	1st May	Wednesday	1st May	Thursday
Eid-UL-Fitr *** **	***	***	***	***
Eid-UL-Adha *** **	***	***	***	***
Founders' Day	4th August	Sunday	4th August	Monday
Kwame Nkrumah Memorial Day	21st September Saturday		21st September	Sunday
Farmers' Day	6th December	Friday	5th December	Friday
Christmas Day	25th December Wednesday		25th December	Thursday
Boxing Day	26th December Thursday		26th December	Friday

NB: *** There are no fixed dates for the Eid-UL-Fitr and Eid-UL-Adha because they are movable feasts

3. Academic Programs and Degrees

3.1 Faculty of Business Administration & Communication Arts

3.1.1. Message from the Dean

Dear Students, Faculty, and Friends of the Faculty,

As the Dean of the Faculty of Business Administration and Communication Arts at ACity, I am honoured to welcome you to our academic catalogue for the 2024/25 academic year. This catalogue is not just a compilation of courses and programs; it reflects our commitment to excellence, innovation, and the holistic development of our students.

In today's rapidly changing world, business and communication are more critical than ever. Our programs are designed to equip you with the essential skills and knowledge to navigate these dynamic landscapes. Whether your passion lies in Entrepreneurship, Accounting, Marketing, Human Resources Management, Banking and Finance, Advertising and Public Relations, Journalism or Mass Communication, we provide a rigorous and supportive learning environment to help you thrive.

Our esteemed faculty members are accomplished academics and experienced professionals who bring real-world insights into the classroom. They are dedicated to fostering critical thinking, creativity, and ethical leadership among our students. We encourage you to engage actively with your professors and peers, as collaboration is crucial to your success.

As you explore the offerings within this catalogue, I urge you to embrace the opportunities presented. Participate in internships, workshops, and extracurricular activities to enrich your academic experience and prepare you for your future career.

At ACity, we are proud of our diverse and vibrant community. Together, we are shaping successful professionals and responsible citizens committed to making a positive impact in our society.

I wish you all a rewarding and inspiring academic year ahead. Welcome to the journey of a lifetime!

Warm regards,

Prof. Enoch Opoku Antwi

Dean, Faculty of Business Administration and Communication Arts

3.1.2. Structure of the Faculty

Our faculty of Business, Entrepreneurship and Communication Arts provide a hands-on and evidence-based experiential learning experience that prepares students for academic and career success in a globally competitive and professional environment. The faculty are practical and experienced in their field of specialisation. We are organised into two distinct departments, each focusing on key areas of study and professional development:

3.1.2.1. Department of Business Administration and Entrepreneurship

This department emphasises the foundational principles of business management and administration, accounting, finance, marketing, human resource management, and entrepreneurship. It offers a range of programs to equip students with the skills needed to navigate the complexities of the business world as well as the new entrepreneurial dynamics. Through a blend of theoretical coursework and practical applications using projects, case studies and simulations, students learn to develop innovative solutions, lead teams, and foster entrepreneurial ventures.

3.1.2.2. Department of Communication Arts

Focused on the multifaceted field of modern communication and media impact, our department of Communication Arts provides students with a deeper-level unified understanding of present-day media, journalism, public relations, and mass communication. Programs enhance students' critical thinking, creativity, impact, and practical communication skills. Students engage in hands-on projects, report writings, reflections, collaborations, and real-world experiences, preparing them to excel in various communication roles across industries.

The practical sessions enabled by the University's Media Lab, allow students to practise journalism, video editing, and podcast development, among other things. The Lab also houses ACity Radio, which does live broadcasts with internal and external stakeholders to present rich, intellectually stimulating, socially engaging, and fun content for the next generation of students globally!

These two departments and the Media Lab foster a collaborative and interdisciplinary approach, allowing students to benefit from the synergies between business practices and communication strategies. The Faculty of Business and Communication Arts is dedicated to nurturing leaders who are skilled professionals and socially responsible citizens ready to make a positive impact in their communities.

3.1.3. Programs offered in the Faculty

3.1.3.1. Department of Business Administration and Entrepreneurship

A. BBA Accounting

Course Diet for levels 200, 300 and 400

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE								
Year 1 / Level 100	REGULAR COURSES							
	S/N	Code	Course Name	Cat	L	T	P	C
	SEMESTER 1							
	1	UC1101	Communication Skills	Man	2	0	3	3
	2	MT1112	Essential Mathematics for Business	Core	1	2	0	3
	3	UC1102	French Language	Man	2	0	3	3
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	Man	2	0	0	0
	5	GB1115	Introduction to Doing Business in Africa	Core	1	2	0	3
	6	GB1116	Introduction to Programming with Python	Core	1	1	3	3
	7	GB1117	Technology and Society	Core	1	1	0	2
			TOTAL		10	6	9	17
	SEMESTER 2							
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	Man	2	0	0	0
	2	AC1234	Financial Accounting I	Core	1	2	0	3
	3	UC1202	Logic and Critical Thinking	Man	1	1	0	2
	4	GB1216	Principles of Management	Man	1	2	0	3
	5	GB1217	Principles of Microeconomics	Man	1	2	0	3
	6	UC1203	Text and Meaning	Man	1	1	0	2
			TOTAL		7	8	0	13

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE

Year 2 / Level 200	SEMESTER 1							
	1	AC2132	Database Management Systems	Core	1	1	3	3
	2	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	Man	1	1	0	2
	3	AC2173	Global Environment of Business Decisions	Core	1	2	0	3
	4	GB2114	Intellectual Property Law	Man	1	2	0	3
	5	UC2102	Leadership Seminar I	Man	2	0	0	0
	6	GB2116	Principles of Macroeconomics	Man	1	2	0	3
	7	MT2111	Quantitative Methods in Business (With MATLAB)	Core	1	2	0	3
			TOTAL		8	10	3	17
	SEMESTER 2							
	1	UC2201	African Studies	Man	1	1	0	2
	2	AC2232	Cost and Management Accounting	Core	1	2	0	3
	3	AC2254	Data Analysis for Decision Making	Core	1	2	0	3
	4	AC2234	Financial Accounting II	Core	1	2	0	3
	5	AC2246	Software Applications in Finance	Core	1	2	0	3
	6	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	Man	1	1	0	2
			TOTAL		6	10	0	16
Year 3 / Level 300	SEMESTER 1							
	1	GB3111	Business Finance	Man	1	2	0	3
	2	GB3112	Entrepreneurial Strategy and Business Models	Man	1	2	0	3
	3	AC3133	Financial Reporting I	Spl	1	2	0	3
	4	UC3101	Leadership Seminar II	Man	2	0	0	0
	5	AC3137	Management Accounting	Core	1	2	0	3
	6	GB3116	Management and Organisational Behaviour	Man	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE								
Year 4 / Level 400	7	AC3147	Monetary and Financial System	Spl	1	2	0	3
			TOTAL		8	12	0	18
	SEMESTER 2							
	1	AC3231	Auditing and Assurance	Spl	1	2	0	3
	2	GB3213	Business Research Methods	Man	1	2	0	3
	3	AC3242	Company Law	Core	1	2	0	3
	4	AC3236	Financial Reporting II	Spl	1	2	0	3
	5	AC3290	INDUSTRY INTERNSHIP	Core	0	0	0	2
	6	GB3217	Project Management with Risk Analysis for Business	Man	1	2	0	3
	7	AC3237	Public Sector Accounting	Spl	1	2	0	3
			TOTAL		6	12	0	20
	SEMESTER 1							
	1	GB4112	Contemporary Issues and Practice in Business	Man	1	2	0	3
	2	AC41XX	Elective 1	Elect	1	1	0	2
	3	AC4131	Corporate Reporting and Analysis	Spl	1	2	0	3
	4	AC4134	Principles and Practice of Taxation	Core	1	2	0	3
	5	AC4197	Project Work I	SPL	0	6	0	3
	6	GB4116	The Business Professional	Man	1	2	0	3
			TOTAL		5	15	0	17
	SEMESTER 2							
	1	AC4242	Corporate Finance	Spl	1	2	0	3
	2	AC42XX	Elective 2	Elect	1	1	0	2
	3	AC4244	Financial Risk Management	Core	1	2	0	3
	4	AC4235	Forensic Accounting	Spl	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE								
	5	AC4298	Project Work II	SPL	0	6	0	3
	6	GB4211	Sustainable Strategic Management	Man	1	2	0	3
		TOTAL			5	15	0	17
		TOTAL CREDITS FOR PROGRAMME			55	88	12	135

Electives

OPTIONS FOR ELECTIVE 1	Year 4 / Level 400 SEMESTER 1							
	1	AC4141	Banking Operations and Management	Elect	1	1	0	2
	2	AC4162	Cross-cultural Communications	Elect	1	1	0	2
	3	AC4144	Development Finance	Elect	1	1	0	2
	4	AC4165	Industrial Relations	Elect	1	1	0	2
	5	AC4144	Micro-finance Lending	Elect	1	1	0	2
OPTIONS FOR ELECTIVE 2	Year 4 / Level 400 SEMESTER 2							
	1	AC4235	Forensic Accounting	Elect	1	1	0	2
	2	AC4257	Managing Family Business	Elect	1	1	0	2
	3	AC4274	Marketing of Financial Services	Elect	1	1	0	2
	4	AC4237	Public Sector Accounting	Elect	1	1	0	2
	5	AC4245	Sustainable Banking and Finance	Elect	1	1	0	2

Course Diet for level 100

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE								
Year 1/ Level 100	REGULAR COURSES							
	S/N	Code	Course Name	Cat	L	T	P	C
	SEMESTER 1							

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE

Year 2 / Level 200	1	UC1101	Communication Skills	Man	2	0	3	3
	2	MT1112	Essential Mathematics for Business	Core	1	2	0	3
	3	UC1102	French Language	Man	2	0	3	3
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	Man	2	0	0	0
	5	GB1115	Introduction to Doing Business in Africa	Core	1	2	0	3
	6	GB1116	Introduction to Programming with Python	Core	1	1	3	3
	7	GB1117	Technology and Society	Core	1	1	0	2
			TOTAL		10	6	9	17
	SEMESTER 2							
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	Man	2	0	0	0
	2	AC1234	Financial Accounting I	Core	1	2	0	3
	3	UC1202	Logic and Critical Thinking	Man	1	1	0	2
	4	GB1216	Principles of Management	Core	1	2	0	3
	5	GB1217	Principles of Microeconomics	Core	1	2	0	3
	6	UC1203	Text and Meaning	Man	1	1	0	2
			TOTAL		7	8	0	13
Year 2 / Level 200	SEMESTER 1							
	1	AC2132	Database Management Systems	Core	1	1	3	3
	2	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	Man	1	1	0	2
	3	AC2173	Global Environment of Business Decisions	Core	1	2	0	3
	4	GB2114	Intellectual Property Law	Core	1	2	0	3
	5	UC2102	Leadership Seminar I	Man	2	0	0	0
	6	GB2116	Principles of Macroeconomics	Core	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE								
	7	MT2111	Quantitative Methods in Business (With MATLAB)	Core	1	2	0	3
			TOTAL		8	10	3	17
	SEMESTER 2							
	1	UC2201	African Studies	Man	1	1	0	2
	2	AC2232	Cost and Management Accounting	Core	1	2	0	3
	3	AC2254	Data Analysis for Decision Making	Core	1	2	0	3
	4	AC2234	Financial Accounting II	Core	1	2	0	3
	5	AC2246	Software Applications in Finance	Core	1	2	0	3
	6	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	Man	1	1	0	2
			TOTAL		6	10	0	16
Year 3 / Level 300	SEMESTER 1							
	1	GB3111	Business Finance	Core	1	2	0	3
	2	GB3112	Entrepreneurial Strategy and Business Models	Core	1	2	0	3
	3	AC3133	Financial Reporting I	Spl	1	2	0	3
	4	UC3101	Leadership Seminar II	Man	2	0	0	0
	5	AC3137	Management Accounting	Core	1	2	0	3
	6	GB3116	Management and Organisational Behaviour	Core	1	2	0	3
	7	AC3147	Monetary and Financial System	Spl	1	2	0	3
			TOTAL		8	12	0	18
	SEMESTER 2							
	1	AC3231	Auditing and Assurance	Spl	1	2	0	3
	2	GB3213	Business Research Methods	Core	1	2	0	3
	3	AC3242	Company Law	Core	1	2	0	3
	4	AC3236	Financial Reporting II	Spl	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Accounting) COURSE STRUCTURE								
	5	AC3290	INDUSTRY INTERNSHIP	Core	0	0	0	2
	6	GB3217	Project Management with Risk Analysis for Business	Core	1	2	0	3
	7	AC3237	Public Sector Accounting	Core	1	2	0	3
			TOTAL		6	12	0	20
Year 4 / Level 400	SEMESTER 1							
	1	GB4112	Contemporary Issues and Practice in Business	Core	1	2	0	3
	2	AC4121	Elective 1	Elect	1	1	0	2
	3	AC4131	Corporate Reporting and Analysis	Spl	1	2	0	3
	4	AC4134	Principles and Practice of Taxation	Core	1	2	0	3
	5	AC4197	Project Work I	SPL	0	6	0	3
	6	GB4116	The Business Professional	Core	1	2	0	3
			TOTAL		5	15	0	17
	SEMESTER 2							
	1	AC4242	Corporate Finance	Core	1	2	0	3
	2	AC4243	Elective 2	Elect	1	1	0	2
	3	AC4244	Financial Risk Management	Core	1	2	0	3
	4	AC4235	Forensic Accounting	Core	1	2	0	3
	5	AC4298	Project Work II	SPL	0	6	0	3
	6	GB4211	Sustainable Strategic Management	Core	1	2	0	3
			TOTAL		5	15	0	17
	TOTAL CREDITS FOR PROGRAMME				55	88	12	135

Electives

OPTIONS FOR ELECTIVE 1	Year 4 / Level 400 SEMESTER 1							
	1	AC4141	Banking Operations and Management	Elect	1	1	0	2
	2	AC4162	Cross-cultural Communications	Elect	1	1	0	2

	3	AC4144	Development Finance	Elect	1	1	0	2
OPTIONS FOR ELECTIVE 2	Year 4 / Level 400 SEMESTER 2							
	1	AC4257	Managing Family Business	Elect	1	1	0	2
	2	AC4274	Marketing of Financial Services	Elect	1	1	0	2
	3	AC4236	Social Entrepreneurship	Elect	1	1	0	2

B. BBA Banking and Finance

Course Diet for levels 100, 200, 300 and 400

BACHELOR OF BUSINESS ADMINISTRATION (Banking and Finance) COURSE STRUCTURE									
TOTAL CREDITS FOR THE PROGRAM						135			
Year/Level	S/N	Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	Man	2	0	3	3	
	2	MT1112	Essential Mathematics for Business	Core	1	2	0	3	
	3	UC1102	French Language	Man	2	0	3	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	Man	2	0	0	0	
	5	GB1115	Introduction to Doing Business in Africa	Core	1	2	0	3	
	6	GB1116	Introduction to Programming with Python	Core	1	1	3	3	
	7	GB1117	Technology and Society	Core	1	1	0	2	
			TOTAL		10	6	9	17	
	SEMESTER 2								
	1	BF1234	Financial Accounting I	Core	1	2	0	3	
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	Man	2	0	0	0	
	3	UC1202	Logic and Critical Thinking	Man	1	1	0	2	
	4	GB1216	Principles of Management	Man	1	2	0	3	
	5	GB1217	Principles of Microeconomics	Man	1	2	0	3	
	6	UC1203	Text and Meaning	Man	1	1	0	2	
			TOTAL		7	8	0	13	
Year 2 / Level 200	SEMESTER 1								
	1	BF2141	Banking Law and Practice	Core	1	2	0	3	
	2	BF2132	Database Management Systems	Core	1	1	3	3	

BACHELOR OF BUSINESS ADMINISTRATION (Banking and Finance) COURSE STRUCTURE

	3	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	Man	1	1	0	2
	4	GB2114	Intellectual Property Law	Core	1	2	0	3
	5	UC2102	Leadership Seminar I	Man	2	0	0	0
	6	GB2116	Principles of Macroeconomics	Core	1	2	0	3
	7	MT2111	Quantitative Methods in Business (With MATLAB)	Core	1	2	0	3
			TOTAL		8	10	3	17
	SEMESTER 2							
	1	UC2201	African Studies	Man	1	1	0	2
	2	BF2240	Banking Operations and Management	Spl	1	2	0	3
	3	BF2232	Cost and Management Accounting	Core	1	2	0	3
	4	BF2254	Data Analysis for Decision Making	Core	1	2	0	3
	5	BF2244	Economics of International Trade	Core	1	2	0	3
	6	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	Man	1	1	0	2
	7	BF2246	Software Applications in Finance	Core	1	2	0	3
			TOTAL		7	12	0	19
Year 3 / Level 300	SEMESTER 1							
	1	GB3111	Business Finance	Core	1	2	0	3
	2	GB3112	Entrepreneurial Strategy and Business Models	Core	1	2	0	3
	3	BF3133	Financial Reporting I	Spl	1	2	0	3
	4	BF3140	Fintech and Electronic Banking	Spl	1	2	0	3
	5	UC3101	Leadership Seminar II	Man	2	0	0	0
	6	GB3116	Management and Organisational Behaviour	Core	1	2	0	3
	7	BF3147	Monetary and Financial System	Spl	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Banking and Finance) COURSE STRUCTURE

			TOTAL		8	12	0	18
	SEMESTER 2							
	1	GB3213	Business Research Methods	Core	1	2	0	3
	2	GB3222	Company Law	Core	1	2	0	3
	3	BF3240	Credit Policy and Treasury Management	Spl	1	2	0	3
	4	BF3236	Financial Reporting II	Spl	1	2	0	3
	5	BF3290	INDUSTRY INTERNSHIP	Core	0	0	0	2
	6	GB3217	Project Management with Risk Analysis	Core	1	2	0	3
	7	BF3241	Theory of Investments	Spl	1	2	0	3
			TOTAL		6	12	0	20
Year 4 / Level 400	SEMESTER 1							
	1	GB4112	Contemporary Issues and Practice in Business	Core	1	2	0	3
	2	BF41XX	Elective 1	Elect	1	1	0	2
	3	BF4140	Fixed Income Analysis	Spl	1	2	0	3
	4	BF4197	Project Work I	Spl	0	6	0	3
	5	BF4145	Sustainable Banking and Finance	Spl	1	2	0	3
	6	GB4116	The Business Professional	Core	1	2	0	3
			TOTAL		5	15	0	17
	SEMESTER 2							
	1	BF4242	Corporate Finance	Spl	1	2	0	3
	2	BF42XX	Elective 2	Elect	1	1	0	2
	3	BF4244	Financial Risk Management	Core	1	2	0	3
	4	BF4298	Project Work II	Spl	0	6	0	3
	5	GB4211	Sustainable Strategic Management	Core	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Banking and Finance) COURSE STRUCTURE								
			TOTAL		4	13	0	14
		TOTAL CREDITS FOR PROGRAMME			55	88	12	135

Electives

OPTIONS FOR ELECTIVE 1	OPTIONS FOR ELECTIVE 1: Year 4 / Level 400 SEMESTER 1							
	S/N	Code	Course Name	Cat	L	T	P	C
	1	BF4162	Cross-cultural Communications	Elect	1	1	0	2
	2	BF4144	Development Finance	Elect	1	1	0	2
	3	BF4134	Principles and Practice of Taxation	Elect	1	1	0	2
OPTIONS FOR ELECTIVE 2	OPTIONS FOR ELECTIVE 2: Year 4 / Level 400 SEMESTER 2							
	S/N	Code	Course Name	Cat	L	T	P	C
	1	BF4235	Forensic Accounting	Elect	1	1	0	2
	2	BF4274	Marketing of Financial Services	Elect	1	1	0	2
	3	BF4255	Social Entrepreneurship	Elect	1	1	0	2

D. BBA Entrepreneurship

Course Diet for levels 100, 200, 300 and 400

BACHELOR OF BUSINESS ADMINISTRATION (Entrepreneurship) COURSE STRUCTURE									
	REGULAR COURSES								
	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	Man	2	0	3	3	
	2	MT1112	Essential Mathematics for Business (With MATLAB)	Core	1	2	0	3	
	3	UC1102	French Language	Man	2	0	3	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	Man	2	0	0	0	
	5	GB1115	Introduction to Doing Business in Africa	Core	1	2	0	3	
	6	GB1116	Introduction to Programming with Python	Core	1	1	3	3	
	7	GB1117	Technology and Society	Core	1	1	0	2	
			TOTAL		10	6	9	17	
	SEMESTER 2								
	1	EP1234	Financial Accounting I	Core	1	2	0	3	
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	Man	2	0	0	0	
	3	UC1202	Logic and Critical Thinking	Man	2	0	0	2	
	4	EP1273	Market Intelligence	Core	1	2	0	3	
	5	EP1264	Principles of Human Resource Management (HRM)	Core	1	2	0	3	
	6	GB1216	Principles of Management	Core	1	2	0	3	
	7	GB1217	Principles of Microeconomics	Core	1	2	0	3	
	8	UC1203	Text and Meaning	Man	2	0	0	2	
			TOTAL		11	10	0	19	
SEMESTER 1									

BACHELOR OF BUSINESS ADMINISTRATION (Entrepreneurship) COURSE STRUCTURE								
Year 2 / Level 200	1	EP2152	Financial Statements for Decision-making	Core	1	2	0	3
	2	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	Man	2	0	0	2
	3	EP2173	Global Environment of Business Decisions	Core	1	2	0	3
	4	GB2114	Intellectual Property Law	Core	1	2	0	3
	5	EP2175	Introduction to Digital Analytics	Core	1	2	0	3
	6	UC2102	Leadership Seminar I	Man	2	0	0	0
	7	GB2116	Principles of Macroeconomics	Core	1	2	0	3
	8	MT2111	Quantitative Methods in Business (With MATLAB)	Core	1	2	0	3
			TOTAL		10	12	0	20
	SEMESTER 2							
	1	UC2201	African Studies	Man	2	0	0	2
	2	EP2273	Consumer Preference and Behaviour	Core	1	2	0	3
	3	EP2254	Data Analysis for Decision-Making	Core	1	2	0	3
	4	EP2259	Enterprise Development I	Spl	1	2	0	3
	5	EP2255	Entrepreneurial Selling	Core	1	2	0	3
	6	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	Man	2	0	0	2
	7	EP2257	International Entrepreneurship	Core	1	2	0	3
			TOTAL		9	10	0	19
Year 3 / Level 300	SEMESTER 1							
	1	GB3111	Business Finance	Core	1	2	0	3
	2	EP3152	E-commerce for Entrepreneurs	Core	1	2	0	3
	3	GB3112	Entrepreneurial Strategy and Business Models	Man	1	2	0	3
	4	EP3154	Growing and Managing New Ventures	Core	1	2	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Entrepreneurship) COURSE STRUCTURE									
	5	UC3101	Leadership Seminar II	Man	2	0	0	0	
	6	GB3116	Management and Organisational Behaviour	Core	1	2	0	3	
	7	EP3157	Management of Process and Product Innovation	Core	1	2	0	3	
			TOTAL		8	12	0	18	
	SEMESTER 2								
	1	EP3251	Achieving Effective Operations	Core	1	2	0	3	
	2	GB3212	Business Law	Core	1	2	0	3	
	3	GB3213	Business Research Methods	Core	1	2	0	3	
	4	EP3253	Creating Value through Innovation	Core	1	2	0	3	
	5	EP3259	Enterprise Development II	Spl	1	2	0	3	
	6	EP3290	INDUSTRY INTERNSHIP	Core	0	0	0	2	
	7	GB3217	Project Management with Risk Analysis	Core	1	2	0	3	
			TOTAL		6	12	0	20	
Year 4 / Level 400	SEMESTER 1								
	1	GB4112	Contemporary Issues and Practice in Business	Core	1	2	0	3	
	2	EP4172	Customer Experience Design	Core	1	2	0	3	
	3	EP41XX	Elective 1	Elective	1	1	0	2	
	4	EP4159	Enterprise Development III	SPL	0	6	0	3	
	5	EP4134	Principles and Practice of Taxation	SPL	1	2	0	3	
	6	GB4116	The Business Professional	Core	1	2	0	3	
			TOTAL		5	15	0	17	
	SEMESTER 2								
	1	EP42XX	Elective 2	Elective	1	1	0	2	

BACHELOR OF BUSINESS ADMINISTRATION (Entrepreneurship) COURSE STRUCTURE								
	2	EP4259	Enterprise Development IV	SPL	0	6	0	3
	3	EP4253	Global Planning and Logistics	Core	1	2	0	3
	4	EP4255	Social Entrepreneurship	Core	1	2	0	3
	5	GB4211	Sustainable Strategic Management	Core	1	2	0	3
			TOTAL		4	13	0	14
TOTAL CREDITS FOR PROGRAMME					63	90	9	144

Electives

OPTIONS FOR ELECTIVE 1	Year 4 / Level 400 SEMESTER 1							
	1	EP4171	Corporate Brand Identity Design	Elective	1	1	0	2
	2	EP4162	Cross-cultural Communication	Elective	1	1	0	2
	3	EP4144	Development Finance	Elective	1	1	0	2
OPTIONS FOR ELECTIVE 2	Year 4 / Level 400 SEMESTER 2							
	1	EP4262	Event Management	Elective	1	1	0	2
	2	EP4257	Managing Family Business	Elective	1	1	0	2
	3	EP4277	Sustainable Marketing	Elective	1	1	0	2

E. BBA Human Resource Management

Course Diet for levels 100, 200, 300 and 400

BACHELOR OF BUSINESS ADMINISTRATION (Human Resource Management) COURSE STRUCTURE									
TOTAL CREDITS FOR THE PROGRAM					134				
	S/N	Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100		SEMESTER 1							
	1	UC1101	Communication Skills	Man	2	0	3	3	
	2	MT1112	Essential Mathematics for Business	Man	1	2	0	3	
	3	UC1102	French Language	Man	2	0	3	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	Man	2	0	0	0	
	5	GB1115	Introduction to Doing Business in Africa	Man	1	2	0	3	
	6	GB1116	Introduction to Programming with Python	Man	1	1	3	3	
	7	GB1117	Technology and Society	Man	1	1	0	2	
			TOTAL		10	6	9	17	
		SEMESTER 2							
	1	HR1261	Business, Government and Society	Core	1	2	0	3	
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	Man	2	0	0	0	
	3	UC1202	Logic and Critical Thinking	Man	1	1	0	2	
	4	HR1264	Principles of Human Resource Management (HRM)	Spl	1	2	0	3	
	5	GB1216	Principles of Management	Man	1	2	0	3	
	6	GB1217	Principles of Microeconomics	Man	1	2	0	3	
	7	UC1203	Text and Meaning	Man	1	1	0	2	
			TOTAL		8	10	0	16	
Year 2 / Level 200		SEMESTER 1							
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	Man	1	1	0	2	

BACHELOR OF BUSINESS ADMINISTRATION (Human Resource Management) COURSE STRUCTURE								
	2	HR2173	Global Environment of Business Decisions	Core	1	2	0	3
	3	GB2114	Intellectual Property Law	Core	1	2	0	3
	4	UC2102	Leadership Seminar I	Man	2	0	0	0
	6	GB2116	Principles of Macroeconomics	Core	1	2	0	3
	7	HR2168	Psychology and Work	Core	1	2	0	3
	8	MT2111	Quantitative Methods in Business (With MATLAB)	Man	1	2	0	3
			TOTAL		8	11	0	17
	SEMESTER 2							
	1	UC2201	African Studies	Man	1	1	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	Man	1	1	0	2
	3	HR2260	Human Resource Planning	Core	1	2	0	3
	4	HR2257	International Entrepreneurship	Core	1	2	0	3
	5	HR2261	Introduction to Public Administration	Core	1	2	0	3
	6	HR2262	Labour Economics	Core	1	2	0	3
			TOTAL		6	10	0	16
Year 3 / Level 300	SEMESTER 1							
	1	GB3111	Business Finance	Man	1	2	0	3
	2	GB3112	Entrepreneurial Strategy and Business Models	Man	1	2	0	3
	3	HR3164	HR Information Systems	Core	1	2	0	3
	4	HR3165	Industrial and Employee Relations	Man	1	2	0	3
	6	HR3166	Knowledge Management	Core	1	2	0	3
	7	UC3101	Leadership Seminar II	Man	2	0	0	2
	8	GB3116	Management and Organisational Behaviour	Man	1	2	0	3
			TOTAL		8	12	0	20

BACHELOR OF BUSINESS ADMINISTRATION (Human Resource Management) COURSE STRUCTURE									
		SEMESTER 2							
	1	GB3212	Business Law	Man	1	2	0	3	
	2	HR3290	INDUSTRY INTERNSHIP	Core	0	0	0	2	
	4	HR3265	Performance and Compensation Management	Spl	1	2	0	3	
	5	GB3217	Project Management with Risk Analysis	Man	1	2	0	3	
	6	GB3213	Business Research Methods	Man	1	2	0	3	
	7	HR3267	Strategic Human Resource Management	Core	1	2	0	3	
			TOTAL		5	10	0	17	
Year 4 / Level 400		SEMESTER 1							
	1	HR4161	Change Management	Spl	1	2	0	3	
	2	GB4112	Contemporary Issues and Practice in Business	Man	1	2	0	3	
	3	HR41XX	Elective 1	Elective	1	1	0	2	
	4	HR4164	Employment Law	SPL	1	2	0	3	
	5	HR4197	Project Work I	SPL	0	6	0	3	
	6	GB4116	The Business Professional	Man	1	2	0	3	
			TOTAL		5	15	0	17	
		SEMESTER 2							
	1	HR42XX	Elective 2	Core	1	1	0	2	
	2	HR4263	International HRM	Core	1	2	0	3	
	3	HR4298	Project Work II	Spl	0	6	0	3	
	4	HR4265	Public Sector HRM	Spl	1	2	0	3	
	5	GB4211	Sustainable Strategic Management	Man	1	2	0	3	
			TOTAL		4	13	0	14	
		TOTAL CREDITS FOR PROGRAMME							
					54	87	9	134	

Electives

OPTIONS FOR ELECTIVE 1	OPTIONS FOR ELECTIVE 1: Year 4 / Level 400 SEMESTER 1							
	S/N	Code	Course Name	Cat	L	T	P	C
	1	HR4162	Cross-cultural Communications	Elect	1	1	0	2
	2	HR4144	Development Finance	Elect	1	1	0	2
	3	HR4158	Supply Chain Management	Elect	1	1	0	2
OPTIONS FOR ELECTIVE 2	OPTIONS FOR ELECTIVE 2: Year 4 / Level 400 SEMESTER 2							
	S/N	Code	Course Name	Cat	L	T	P	C
	1	HR4262	Event Management	Elect	1	1	0	2
	2	HR4257	Managing Family Business	Elect	1	1	0	2
	3	HR4255	Social Entrepreneurship	Elect	1	1	0	2

F. BBA Marketing

Course Diet for levels 100, 200, 300 and 400

BACHELOR OF BUSINESS ADMINISTRATION (Marketing) COURSE STRUCTURE								
	REGULAR COURSES							
	S/N	Course Code	Course Name	Cat	L	T	P	C
Year 1 / Level 100	SEMESTER 1							
	1	UC1101	Communication Skills	Man	1	2	3	3
	2	MT1112	Essential Mathematics for Business (With MATLAB)	Core	1	2	0	3
	3	UC1102	French Language	Man	1	2	3	3
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	Man	2	0	0	0
	5	GB1115	Introduction to Doing Business in Africa	Core	1	2	0	3
	6	GB1116	Introduction to Programming with Python	Core	1	1	3	3
	7	GB1117	Technology and Society	Core	1	1	0	2
			TOTAL		8	10	9	17
	SEMESTER 2							
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	Man	2	0	0	0
	2	UC1202	Logic and Critical Thinking	Man	2	0	0	2
	3	MK1273	Market Intelligence	Core	1	2	0	3
	4	GB1216	Principles of Management	Core	1	2	0	3
	5	MK1275	Principles of Marketing	Core	1	2	0	3
	6	GB1217	Principles of Microeconomics	Core	1	2	0	3
	7	UC1203	Text and Meaning	Man	2	0	0	2
			TOTAL		10	8	0	16
	SEMESTER 1							

BACHELOR OF BUSINESS ADMINISTRATION (Marketing) COURSE STRUCTURE								
Year 2 / Level 200	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	Man	2	0	0	2
	2	MK2173	Global Environment of Business Decisions	Core	1	2	0	3
	3	GB2114	Intellectual Property Law	Core	1	2	0	3
	4	MK2175	Introduction to Digital Analytics	Core	1	2	0	3
	5	UC2102	Leadership Seminar I	Man	2	0	0	0
	6	GB2116	Principles of Macroeconomics	Core	1	2	0	3
	7	MT2111	Quantitative Methods in Business (With MATLAB)	Core	1	2	0	3
			TOTAL		9	10	0	17
	SEMESTER 2							
	1	UC2201	Africa Studies	Man	2	0	0	2
	2	MK2254	Data Analysis for Decision Making	Core	1	2	0	3
	3	MK2273	Consumer Preference and Behaviour	Core	1	2	0	3
	4	MK2274	Customer Relationship Management	Core	1	2	0	3
	5	MK2255	Entrepreneurial Selling	Core	1	2	0	3
	6	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	Man	2	2	0	2
	7	MK2257	International Entrepreneurship	Core	1	2	0	3
			TOTAL		9	12	0	19
Year 3 / Level 300	SEMESTER 1							
	1	MK3171	Brand Management	Core	1	2	0	3
	2	GB3111	Business Finance	Core	1	2	0	3
	3	MK3172	Digital Marketing Communications Strategy I	Core	1	2	0	3
	4	GB3112	Entrepreneurial Strategy and Business Models	Core	1	2	0	3
	5	UC3101	Leadership Seminar II	Man	2	0	0	0

BACHELOR OF BUSINESS ADMINISTRATION (Marketing) COURSE STRUCTURE								
	6	GB3116	Management and Organisational Behaviour	Core	1	2	0	3
	7	MK3177	Marketing Information Systems	Core	2	0	3	3
			TOTAL		9	10	3	18
	SEMESTER 2							
	1	GB3212	Business Law	Core	1	2	0	3
	2	GB3213	Business Research Methods	Core	1	2	0	3
	3	MK3253	Creating Value through Innovation	Core	1	2	0	3
	4	MK3274	Digital Marketing Communications Strategy II	Core	1	2	0	3
	5	MK3290	INDUSTRY INTERNSHIP	Core	0	0	0	2
	6	MK3276	Marketing Career In Practice	Core	1	2	0	3
	7	GB3217	Project Management with Risk Analysis	Man	1	2	0	3
			TOTAL		6	12	0	20
Year 4 / Level 400	SEMESTER 1							
	1	GB4112	Contemporary Issues and Practice in Business	Core	1	2	0	3
	2	MK4172	Customer Experience Design	Core	1	2	0	3
	3	MK41XX	Elective 1	Elective	1	1	0	2
	4	MK4174	Interactive Marketing Management	Core	1	2	0	3
	5	MK4197	Project Work I	SPL	0	6	0	3
	6	GB4116	The Business Professional	Core	1	2	0	3
			TOTAL		5	15	0	17
	SEMESTER 2							
	1	MK42XX	Elective 2	Elective	1	1	0	2
	2	MK4273	International Marketing	SPL	1	2	0	3
	3	MK4298	Project Work II	SPL	0	6	0	3

BACHELOR OF BUSINESS ADMINISTRATION (Marketing) COURSE STRUCTURE								
	4	MK4277	Sustainable Marketing	Core	1	2	0	3
	5	GB4211	Sustainable Strategic Management	Core	1	2	0	3
			TOTAL		4	13	0	14
TOTAL CREDITS FOR PROGRAMME					60	90	12	138

3.1.3.2. Department of Communication Arts

A. BA. Advertising and Public Relations

Course Diet for levels 100, 200, 300 and 400

Advertising & Public Relations Programme									
TOTAL PROGRAMME CREDITS					131				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	AP1125	Communication and Culture	C	1	2	0	3	
	3	UC1102	French Language	M	2	0	3	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	5	GB1116	Introduction to Programming with Python	C	1	1	3	3	
	6	MT1112	Essential Mathematics for Business (with MATLAB)	C	1	2	0	3	
	7	GB1117	Technology and Society	C	1	1	0	2	
			Total		10	6	9	17	
	SEMESTER 2								
	1	GB1216	Principles of Management	C	2	0	3	3	
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	3	AP1220	Introduction to Advertising	C	1	2	0	3	
	4	AP1221	Introduction to Public Relations	C	1	2	0	3	
	5	AP1224	Visual Communication	C	1	2	0	3	
	6	UC1202	Logic and Critical Thinking	M	1	1	0	2	
	7	UC1203	Text and Meaning	M	1	1	0	2	

Advertising & Public Relations Programme								
			Total		9	8	3	16
Year 2 / Level 200	SEMESTER 1							
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	1	1	0	2
	2	UC2102	Leadership Seminar I	M	2	0	0	0
	3	AP2126	Communication Laws and Ethics	C	1	2	0	3
	4	UC2101	Copywriting for Strategic Communication	C	1	2	0	3
	5	AP2122	Introduction to Photography	C	2	0	3	3
	6	AP2124	Digital Analytics for Advertisers and Public Relations Practitioners	C	1	2	0	3
	7	AP2123	Public Relations and Media Interface	C	1	2	0	3
			Total		9	9	3	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	1	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	1	1	0	2
	3	AP2222	Case Studies in Strategic Communication	C	2	0	3	3
	4	AP2273	Consumer Preference and Behaviour	C	1	2	0	3
	5	AP2223	Public Speaking Techniques	C	1	2	0	3
	6	AP2228	Theories of Communication	C	1	2	0	3
			Total		7	8	3	16
Year 3 / Level 300	SEMESTER 1							
	1	UC3101	Leadership Seminar II	M	2	0	0	0
	2	GB3112	Entrepreneurial Strategy and Business Models	C	1	2	0	3
	3	AP3171	Brand Management	C	1	2	0	3
	4	AP3122	Communication Research Methods	C	1	2	0	3

Advertising & Public Relations Programme								
	5	AP2124	Crisis Management	C	1	2	0	3
	6	AP3172	Digital Marketing Communications Strategy I	C	1	2	0	3
	7	AP3123	Media Lab: Advertisement Production	C	2	0	3	3
			Total		9	10	3	18
	SEMESTER 2							
	1	AP3220	Account and Media Planning	C	1	2	0	3
	2	AP3226	Collaborative Communication	C	2	0	3	3
	3	AP3222	Corporate Social Responsibility	C	1	2	0	3
	4	AP3274	Digital Marketing Communications Strategy II	C	2	0	3	3
	5	AP3290	Industry Internship	Spl	0	0	0	2
	6	AP3223	Social Media and Online Communities	C	1	2	0	3
			Total		7	6	6	17
	SEMESTER 1							
	1	AP4197	Communications Project I	Spl	0	6	0	3
Year 4 / Level 400	2	AP4172	Customer Experience design	C	1	2	0	3
	3	AP41XX	Elective I	Elect	1	2	0	3
	4	AP4121	Live Event	C	2	0	3	3
	5	AP4128	Multimedia Production	C	2	0	3	3
			Total		6	10	6	15
	SEMESTER 2							
	1	AP4225	Advanced Writing for Professional Communicators	C	1	2	0	3
	2	AP4298	Communications Project II	SPL	0	6	0	3
	3	AP4221	Contemporary Issues and Practice in Advertising and Public Relations	C	1	2	0	3

Advertising & Public Relations Programme								
	4	AP4227	Documentary Storytelling	C	2	0	3	3
	5	AP42XX	Elective II	Elect	1	2	0	3
			Total		5	12	3	15
			Grand Total		62	69	36	131

Electives

OPTIONS FOR ELECTIVE 1: Year 4 / Level 400 SEMESTER 1							
S/N	Code	Course Name	Cat	L	T	P	C
1	AP4120	Advanced Photography	Elective	1	2	0	3
2	AP4171	Corporate Brand Identity Design	Elective	1	2	0	3
OPTIONS FOR ELECTIVE 2: Year 4 / Level 400 SEMESTER 2							
S/N	Code	Course Name	Cat	L	T	P	C
1	AP4255	Social Entrepreneurship	Elective	1	2	0	3
2	AP4279	Tourism Marketing	Elective	1	2	0	3

B. BA. Journalism and Mass Communication

Course Diet for levels 100, 200, 300 and 400

Journalism and Mass Communication Programme									
TOTAL PROGRAMME CREDITS					131				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	JM1125	Communication and Culture	C	1	2	0	3	
	3	UC1102	French Language	M	2	0	3	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	5	GB1116	Introduction to Programming with Python	C	1	1	3	3	
	6	MT1112	Essential Mathematics for Business (with MATLAB)	C	1	2	0	3	
	7	GB1117	Technology and Society	C	1	1	0	2	
			Total		10	6	9	17	
	SEMESTER 2								
	1	GB1216	Principles of Management	C	1	2	0	3	
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	3	GB1215	Introduction to Economics	C	1	2	0	3	
	4	JM1225	Introduction to Journalism and Mass Communication	C	2	0	3	3	
	5	JM1224	Visual Communication	C	2	0	3	3	
	6	UC1202	Logic and Critical Thinking	M	1	1	0	2	
	7	UC1203	Text and Meaning	M	1	1	0	2	
			Total		10	6	6	16	
	SEMESTER 1								

Journalism and Mass Communication Programme								
Year 2 / Level 200	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	1	1	0	2
	2	UC2102	Leadership Seminar I	M	2	0	0	0
	3	JM2126	Communication Laws and Ethics	C	1	2	0	3
	4	JM2121	Digital Storytelling	C	1	2	0	3
	5	JM2122	Introduction to Photography	C	2	0	3	3
	6	JM2125	History of Media and Journalism in Ghana	C	1	2	0	3
	7	JM2128	Writing for Media	C	1	2	0	3
			Total		9	9	3	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	1	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	1	1	0	2
	3	JM2225	Newswriting and Reporting	C	2	0	3	3
	4	JM2226	Photojournalism and Narrative	C	2	0	3	3
	5	JM2227	Print Journalism	C	1	2	0	3
	6	JM2223	Public Speaking Techniques	C	1	2	0	3
	7	JM2228	Theories of Communication	C	1	2	0	3
			Total		9	8	6	19
Year 3 / Level 300	SEMESTER 1							
	1	UC3101	Leadership Seminar II	M	2	0	0	0
	2	GB3112	Entrepreneurial Strategy and Business Models	C	1	2	0	3
	3	JM3125	Broadcast Journalism 1: Radio	C	2	0	3	3
	4	JM3122	Communication Research Methods	C	1	2	0	3
	5	JM3127	Editing	C	2	0	3	3

Journalism and Mass Communication Programme								
	6	JM3128	Media Lab: Print and Digital Media	C	2	0	3	3
			Total		10	4	9	15
	SEMESTER 2							
	1	JM3225	Broadcast Journalism 2: Television	C	2	0	3	3
	2	JM3226	Collaborative Communication	C	2	0	3	3
	3	JM3227	Development Communication	C	1	2	0	3
	4	JM3228	Investigative Journalism	C	1	2	0	3
	5	JM3290	Industry Internship	M	0	0	0	2
	6	JM3229	Special Topics in Journalism and Mass Communication	C	2	0	3	3
			Total		8	4	9	17
Year 4 / Level 400	SEMESTER 1							
	1	JM4126	Communication and Artificial Intelligence	C	1	2	0	3
	2	JM41XX	Elective I	Elect	1	1	0	3
	3	JM4197	Journalistic Project I	C	0	6	0	3
	4	JM4127	Live Newsroom	C	2	0	3	3
	5	JM4128	Multimedia Production	C	2	0	3	3
			Total		6	9	6	15
	SEMESTER 2							
	1	JM4225	Advanced Writing for Professional Communicators	C	1	2	0	3
	2	JM4221	Contemporary Issues and Practice in Journalism and Mass Communication	C	1	2	0	3
	3	JM42XX	Elective II	Elect	1	1	0	3
	4	JM4298	Journalistic Project II	C	0	6	0	3
	5	JM4255	Social Entrepreneurship	C	2	0	3	3

Journalism and Mass Communication Programme								
			Total		5	11	3	15
			Grand Total		67	57	51	131

Electives

OPTIONS FOR ELECTIVE 1: Year 4 / Level 400 SEMESTER 1							
S/N	Code	Course Name	Cat	L	T	P	C
1	JM4120	Advanced Photography	Elective	1	2	0	3
2	JM4172	Customer Experience Design	Elective	1	2	0	3
OPTIONS FOR ELECTIVE 2: Year 4 / Level 400 SEMESTER 2							
S/N	Code	Course Name	Cat	L	T	P	C
1	JM4225	Business Reporting	Elective	1	2	0	3
2	JM4226	Documentary Storytelling	Elective	1	2	0	3

3.2. Faculty of Engineering

3.2.1. Message from the Dean

Dear Students, Faculty, and Esteemed Colleagues,

Welcome to the academic catalogue for the 2024/25 academic year at ACity. As the Dean of the Faculty of Engineering, I am thrilled to present the vast array of programs and opportunities designed to inspire and equip you for a successful future in the engineering profession.

Engineering is at the forefront of addressing some of the most pressing challenges of our time, from sustainable development to technological innovation. At ACity, we are committed to providing a rigorous academic environment that fosters creativity, critical thinking, and hands-on problem-solving. Our diverse programs, ranging from Biomedical, Electrical and Electronics, Computer Engineering, Robotics, Mechanical, and Systems & Industrial engineering, are tailored to meet the demands of a rapidly evolving industry and the future world.

Our faculty members are distinguished professionals and researchers dedicated to mentoring students and guiding them through their academic journeys. Their expertise and passion for teaching, research, and innovation ensure that you will receive a well-rounded education that blends theoretical knowledge with practical application in our well-resourced labs and workshops.

As you explore this catalogue, I encourage you to take full advantage of the resources available to you. Engage in research projects, internships, and collaborate with peers. These experiences are invaluable in shaping your skills and preparing you for a successful career in engineering.

We are proud of our vibrant community of innovators, thinkers, and problem solvers. Together, we are not just creating engineers; we are cultivating leaders who will drive change and contribute positively to society.

I wish you an exciting and productive academic year ahead. Welcome to ACity, where your journey in engineering begins!

Best regards,

Professor Benjamin J. Nyarko

Dean, Faculty of Engineering

3.2.2. Structure of the Faculty

The Faculty of Engineering at ACity is committed to providing high-quality education and innovative research opportunities in various engineering disciplines. The faculty is organised into three distinct departments, each focusing on specific areas of engineering and technology:

Department of Electrical, Electronics, and Computer Engineering

This department specialises in the principles and applications of electrical and electronic systems and computer engineering. Students engage in coursework that covers circuit design, signal processing, embedded systems, and software development. The department emphasises hands-on learning through labs and projects, preparing students for telecommunications, robotics, and information technology careers.

Department of Mechanical, Industrial, and Systems Engineering

This department offers a comprehensive curriculum in mechanical engineering, industrial and systems engineering, and robotics principles. Students learn about product design, manufacturing processes, systems optimisation, and project management. The department focuses on developing problem-solving skills and an understanding of efficient systems, enabling graduates to excel in various sectors, including manufacturing, logistics, and operations management.

Department of Biomedical Engineering

This department bridges the gap between engineering and healthcare focussing on applying engineering principles to the medical field. Students learn about advancing areas such as biomechanics, tissue engineering and medical device design, gaining skills crucial for contributing to the future of healthcare technology. Our hands-on approach, combined with opportunities for biomedical research and industry collaboration, prepares students for dynamic careers in medical device development, biomedical research, and healthcare innovation.

These three departments foster a collaborative environment that encourages interdisciplinary learning and research. The Faculty of Engineering at ACity is dedicated to equipping students with the technical knowledge, practical skills, and ethical grounding necessary to address the complex challenges of today's engineering landscape.

3.2.3. Programs offered in the Faculty

3.2.3.1. Department of Electrical, Electronics & Computer Engineering

A. BSC Computer Engineering

Course Diet for levels 100, 200 and 300

Computer Engineering (CE) Programme									
TOTAL PROGRAMME CREDITS					147				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	MT1105	Pre-Calculus	C	2	0	3	3	
	8	GE1108	Technology and Society	C	1	2	0	2	
			Total		15	4	15	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I	C	2	0	3	3	
	2	CE1246	Introduction to Electrical and Electronic Engineering	C	2	0	3	3	
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	4	GE1205	Introduction to Multidisciplinary Design	C	2	0	0	2	
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	6	GE1206	Programming in C	C	2	0	3	3	

Computer Engineering (CE) Programme								
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3
	8	UC1203	Text and Meaning	M	1	2	0	2
			Total		14	4	12	18
Year 2 / Level 200	SEMESTER 1							
	1	MT2103	Analytic Geometry and Calculus II	C	2	0	3	3
	2	CE2145	Circuit Theory	C	2	2	0	3
	3	CE2246	Microelectronics	C	2	0	3	3
	4	CE2136	Data Structures and Algorithms	C	2	0	3	3
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	6	CE2141	Fundamentals of Logic Design	C	2	0	3	3
	7	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3
	8	UC2102	Leadership Seminar I	M	2	0	0	0
			Total		16	2	15	20
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	MT2202	Applied Linear Algebra	C	2	0	3	3
	3	CE2235	Computer Architecture and Organisation	C	2	0	3	3
	4	CE2250	Digital Systems Design	C	2	0	3	3
	5	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	6	CE2140	Computer Systems Engineering	C	2	0	3	3
	7	MT2204	Probability, Statistics and Reliability	C	2	0	3	3
			Total		13	2	15	19
	SEMESTER 1							
Year 3 / Level 300	1	CE3135	Computer Networks	C	2	0	3	3

Computer Engineering (CE) Programme								
	2	MT3103	Differential Equations	C	2	0	3	3
	3	MT3105	Discrete Mathematics	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	CE3151	Microprocessors and Microcontrollers	C	2	0	3	3
	6	CE3147	Signals and Systems	C	2	0	3	3
	7	CE3138	Operating Systems	C	2	0	3	3
	8	GE3105	System Dynamics	C	2	0	0	2
			Total		16	0	18	20
	SEMESTER 2							
	1	CE3245	Automatic Control Systems	C	2	0	3	3
	2	CE3256	Digital Signal Processing	C	2	0	3	3
	3	CE3247	Embedded Systems	C	2	0	3	3
	4	CE3291	Industry Internship	SPL	0	0	0	2
	5	CE3273	Mechatronics	C	2	0	3	3
	6	CE3239	Software Engineering	C	2	0	3	3
	7	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
			Total		12	0	18	20
	SEMESTER 1							
Year 4 / Level 400	1	CE4136	Computer Security	C	2	0	3	3
	2	CE4143	Introduction to Artificial Intelligence	C	2	0	3	3
	3	CE4192	Project Phase I	SPL	0	0	6	3
	4	CE41XX	Technical Elective – I	E	X	X	X	3
	5	CE41XX	Technical Elective – II	E	X	X	X	3
			Total		4	0	12	15

Computer Engineering (CE) Programme								
	SEMESTER 2							
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3
	3	CE4293	Project Phase II	SPL	0	0	6	3
	4	CE42XX	Technical Elective – III	E	X	X	X	3
	5	CE42XX	Technical Elective – IV	E	X	X	X	3
			Total		4	4	6	15
			GRAND TOTAL		94	16	111	147

Specialisations

Biomedical Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4183	Biomedical Instrumentation	E	2	0	3	3
2	CE4184	Biomedical Signal Analysis	E	2	0	3	3
3	CE4251	Real-Time Digital Signal Processing	E	2	0	3	3
4	CE4259	Wireless Sensor Networks	E	2	0	3	3

Telecommunication							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4146	Advanced Digital Signal Processing	E	2	0	3	3
2	CE4155	High Speed Networks	E	2	0	3	3
3	CE4256	Remote Sensing	E	2	0	3	3
4	CE4258	Telecommunication Systems Modelling and Simulation	E	2	0	3	3

Intelligent Systems: Controls and Automation							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4145	Advanced Control Systems	E	2	0	3	3
2	CE4142	Digital Image Processing	E	2	0	3	3
3	CE4232	Machine Learning	E	2	0	3	3
4	CE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Intelligent Systems: Robotics and Mechatronics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4145	Advanced Control Systems	E	2	0	3	3
2	CE4177	Industrial Automation and Robotics	E	2	0	3	3
3	CE4232	Machine Learning	E	2	0	3	3
4	CE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Renewable Energy Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4150	Smart Grid	E	2	0	3	3
2	CE4151	Solid State Electronic Devices	E	2	0	3	3
3	CE4247	Energy Management for a Sustainable Future	E	2	0	3	3
4	CE4248	Green Electronics	E	2	0	3	3

Course Diet for level 400

Computer Engineering (CE) Programme									
TOTAL PROGRAMME CREDITS						147			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	GE1108	Technology and Society	C	1	2	0	2	
			Total		15	4	15	20	
	SEMESTER 2								

Computer Engineering (CE) Programme								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3
	2	CE1245	Basic Electronics	C	2	0	3	3
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2
	6	GE1206	Programming in C	C	2	0	3	3
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3
	8	UC1203	Text and Meaning	M	1	2	0	2
			Total		13	4	15	18
Year 2 / Level 200	SEMESTER 1							
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	2	CE2145	Circuit Theory	C	2	2	0	3
	3	CE2140	Computer Systems Engineering	C	2	0	3	3
	4	CE2136	Data Structures and Algorithms	C	2	0	3	3
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	6	CE2141	Fundamentals of Logic Design	C	2	0	3	3
	7	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3
	8	UC2102	Leadership Seminar I	M	2	0	0	0
			Total		16	2	15	20
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	3	CE2235	Computer Architecture and Organisation	C	2	0	3	3

Computer Engineering (CE) Programme								
	4	CE2250	Digital Systems Design	C	2	0	3	3
	5	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	6	CE2246	Microelectronics	C	2	0	3	3
	7	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
			Total		13	2	15	19
	SEMESTER 1							
Year 3 / Level 300	1	CE3135	Computer Networks	C	2	0	3	3
	2	MT3103	Differential Equations (with MATLAB)	C	2	0	3	3
	3	MT3105	Discrete Mathematics (with MATLAB)	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	CE3151	Microprocessors and Microcontrollers	C	2	0	3	3
	6	CE3147	Signals and Systems	C	2	0	3	3
	7	CE3138	Operating Systems	C	2	0	3	3
	8	GE3105	System Dynamics	C	2	0	0	2
			Total		16	0	18	20
	SEMESTER 2							
	1	CE3245	Automatic Control Systems	C	2	0	3	3
	2	CE3256	Digital Signal Processing	C	2	0	3	3
	3	CE3247	Embedded Systems	C	2	0	3	3
	4	CE3291	Industry Internship	SPL	0	0	0	2
	5	CE3273	Mechatronics	C	2	0	3	3
	6	CE3239	Software Engineering	C	2	0	3	3
	7	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3

Computer Engineering (CE) Programme									
			Total		12	0	18	20	
	SEMESTER 1								
Year 4 / Level 400	1	CE4136	Computer Security	C	2	0	3	3	
	2	CE4143	Introduction to Artificial Intelligence	C	2	0	3	3	
	3	CE4192	Project Phase I	SPL	0	0	6	3	
	4	CE41XX	Technical Elective – I	E	X	X	X	3	
	5	CE41XX	Technical Elective – II	E	X	X	X	3	
			Total		4	0	12	15	
	SEMESTER 2								
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3	
	2	GE4206	Professional Ethics and Values	C	2	2	0	3	
	3	CE4293	Project Phase II	SPL	0	0	6	3	
	4	CE42XX	Technical Elective – III	E	X	X	X	3	
	5	CE42XX	Technical Elective – IV	E	X	X	X	3	
			Total		4	4	6	15	
			GRAND TOTAL		93	16	114	147	

Specialisations

Biomedical Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4183	Biomedical Instrumentation	E	2	0	3	3
2	CE4184	Biomedical Signal Analysis	E	2	0	3	3
3	CE4251	Real-Time Digital Signal Processing	E	2	0	3	3
4	CE4259	Wireless Sensor Networks	E	2	0	3	3

Telecommunication							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4146	Advanced Digital Signal Processing	E	2	0	3	3
2	CE4155	High Speed Networks	E	2	0	3	3
3	CE4256	Remote Sensing	E	2	0	3	3

4	CE4258	Telecommunication Systems Modelling and Simulation	E	2	0	3	3
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Intelligent Systems: Controls and Automation							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4145	Advanced Control Systems	E	2	0	3	3
2	CE4142	Digital Image Processing	E	2	0	3	3
3	CE4232	Machine Learning	E	2	0	3	3
4	CE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Intelligent Systems: Robotics and Mechatronics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4145	Advanced Control Systems	E	2	0	3	3
2	CE4177	Industrial Automation and Robotics	E	2	0	3	3
3	CE4232	Machine Learning	E	2	0	3	3
4	CE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Renewable Energy Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CE4150	Smart Grid	E	2	0	3	3
2	CE4151	Solid State Electronic Devices	E	2	0	3	3
3	CE4247	Energy Management for a Sustainable Future	E	2	0	3	3
4	CE4248	Green Electronics	E	2	0	3	3

B. BSC Electrical and Electronics Engineering

Course Diet for levels 100, 200 and 300

Electrical and Electronics Engineering (EE) Programme								
TOTAL PROGRAMME CREDITS				141				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C
Year 1 / Level 100	SEMESTER 1							
	1	UC1101	Communication Skills	M	2	0	3	3
	2	UC1102	French Language	M	2	2	0	3
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0
	4	GE1105	Introduction to Engineering	C	2	0	3	3
	5	UC1104	Introduction to Programming with Python	C	2	0	3	3
	6	GE1107	Physical Sciences	C	2	0	3	3
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
	8	UC1105	Technology and Society	C	1	2	0	2
			Total		15	4	15	20
	SEMESTER 2							
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	3	EE1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2
	6	GE1206	Programming in C	C	2	0	3	3
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3
	8	UC1203	Text and Meaning	M	1	2	0	2

Electrical and Electronics Engineering (EE) Programme									
			Total		13	4	15	18	
Year 2 / Level 200	SEMESTER 1								
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3	
	2	EE2145	Circuit Theory	C	2	2	0	3	
	3	EE2146	Electrical Energy Conversion and Green Electronics	C	2	0	3	3	
	4	EE2147	Electromagnetic Fields and Waves Theory	C	2	0	3	3	
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2	
	6	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3	
	7	UC2102	Leadership Seminar I	M	2	0	0	0	
			Total		14	2	12	17	
	SEMESTER 2								
	1	UC2201	African Studies	M	1	2	0	2	
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3	
	3	EE2245	Electrical Machines	C	2	0	3	3	
	4	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2	
	5	EE2247	Introduction to Contemporary Electric Power Systems	C	2	2	0	3	
	6	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3	
			Total		11	4	9	16	
Year 3 / Level 300	SEMESTER 1								
	1	MT3103	Differential Equations (with MATLAB)	M	2	0	3	3	
	2	UC3101	Leadership Seminar II	M	2	0	0	0	
	3	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3	
	4	EE3149	Power Electronics	C	2	0	3	3	
	5	EE3147	Signals and Systems	C	2	0	3	3	

Electrical and Electronics Engineering (EE) Programme								
Year 4 / Level 400	6	GE3105	Systems Dynamics	C	2	0	0	2
	7	EE3148	Microelectronics	C	2	0	3	3
			Total		14	0	15	17
	SEMESTER 2							
	1	EE3245	Automatic Control Systems	C	2	0	3	3
	2	EE3246	Electric Power Generation, Transmission and Distribution	C	2	0	3	3
	3	EE3248	Microprocessors and Embedded Systems	C	2	0	3	3
	4	EE3291	Industry Internship	SPL	0	0	0	2
	5	EE3273	Mechatronics	C	2	0	3	3
	6	EE3257	Principles of Communication Systems	C	2	0	3	3
	7	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	8	EE3145	Digital Systems Design	C	2	0	3	3
			Total		14	0	21	23
	SEMESTER 1							
	1	EE4171	Engineering Thermodynamics	C	2	0	3	3
	2	EE4149	Probabilistic Systems Analysis and Applied Probability	C	2	0	3	3
	3	EE4192	Project Phase I	SPL	0	0	6	3
	4	EE41XX	Technical Elective – I	E	X	X	X	3
	5	EE41XX	Technical Elective – II	E	X	X	X	3
			Total		4	0	12	15
	SEMESTER 2							
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3

Electrical and Electronics Engineering (EE) Programme								
	3	EE4293	Project Phase II	SPL	0	0	6	3
	4	EE42XX	Technical Elective – III	E	X	X	X	3
	5	EE42XX	Technical Elective – IV	E	X	X	X	3
			Total		4	4	6	15
			GRAND TOTAL		91	18	108	141

Specialisations

Power Systems Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4147	Advanced Power Generation, Transmission and Distribution	E	2	0	2	3
2	EE4148	Power System Operation and Control	E	2	0	2	3
3	EE4246	Electric Power Systems Analysis and Design	E	2	0	2	3
4	EE4250	Power System Protection and Switchgear	E	2	0	2	3

RF and Microwaves Circuits Design							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4156	Microwave Engineering	E	2	0	3	3
2	EE4159	Radio Frequency (RF) Circuits Design	E	2	0	3	3
3	EE4249	Optoelectronic Devices	E	2	0	3	3
4	EE4253	VLSI Design	E	2	0	3	3

Intelligent Systems: Robotics and Mechatronics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4145	Advanced Control Systems	E	2	0	3	3
2	EE4177	Industrial Automation and Robotics	E	2	0	3	3
3	EE4241	Artificial Intelligence and Robotics	E	2	0	3	3
4	EE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Intelligent Systems: Controls and Automation							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4145	Advanced Control Systems	E	2	0	3	3

2	CS2235	Computer Architecture and Organisation	E	2	0	3	3
3	EE4241	Artificial Intelligence and Robotics	E	2	0	3	3
4	EE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Biomedical Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4183	Biomedical Instrumentation	E	2	0	3	3
2	EE4184	Biomedical Signal Analysis	E	2	0	3	3
3	EE4251	Real-Time Digital Signal Processing	E	2	0	3	3
4	EE4259	Wireless Sensor Networks	E	2	0	3	3

Renewable Energy Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4150	Smart Grid	E	2	0	3	3
2	EE4151	Solid State Electronic Devices	E	2	0	3	3
3	EE4247	Energy Management for a Sustainable Future	E	2	0	3	3
4	EE4248	Green Electronics	E	2	0	3	3

Course Diet for level 400

Electrical and Electronics Engineering (EE) Programme									
TOTAL PROGRAMME CREDITS						141			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	GE1108	Technology and Society	C	1	2	0	2	

Electrical and Electronics Engineering (EE) Programme									
			Total		15	4	15	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	3	EE1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3	
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2	
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	6	GE1206	Programming in C	C	2	0	3	3	
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3	
	8	UC1203	Text and Meaning	M	1	2	0	2	
			Total		13	4	15	18	
Year 2 / Level 200	SEMESTER 1								
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3	
	2	EE2145	Circuit Theory	C	2	2	0	3	
	3	EE2146	Electrical Energy Conversion and Green Electronics	C	2	0	3	3	
	4	EE2147	Electromagnetic Fields and Waves Theory	C	2	0	3	3	
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2	
	6	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3	
	7	UC2102	Leadership Seminar I	M	2	0	0	0	
			Total		14	2	12	17	
	SEMESTER 2								
	1	UC2201	African Studies	M	1	2	0	2	
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3	
	3	EE2245	Electrical Machines	C	2	0	3	3	

Electrical and Electronics Engineering (EE) Programme								
	4	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	5	EE2247	Introduction to Contemporary Electric Power Systems	C	2	2	0	3
	6	EE2246		C	2	0	3	
	7	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
			Total		13	4	12	16
Year 3 / Level 300	SEMESTER 1							
	1	MT3103	Differential Equations (with MATLAB)	M	2	0	3	3
	2	EE3145	Digital Systems Design	C	2	0	3	3
	3	UC3101	Leadership Seminar II	M	2	0	0	0
	4	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3
	5	EE3149	Power Electronics	C	2	0	3	3
	6	EE3147	Signals and Systems	C	2	0	3	3
	7	GE3105	Systems Dynamics	C	2	0	0	2
	8	EE3148	Microelectronics	C	2	0	3	3
			Total		16	0	18	20
	SEMESTER 2							
	1	EE3245	Automatic Control Systems	C	2	0	3	3
	2	EE3246	Electric Power Generation, Transmission and Distribution	C	2	0	3	3
	3	EE3247	Embedded Systems	C	2	0	3	3
	4	EE3291	Industry Internship	SPL	0	0	0	2
	5	EE3273	Mechatronics	C	2	0	3	3
	6	EE3257	Principles of Communication Systems	C	2	0	3	3
	7	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3

Electrical and Electronics Engineering (EE) Programme									
			Total		12	0	18	20	
Year 4 / Level 400	SEMESTER 1								
	1	ME2171	Engineering Thermodynamics	C	2	0	3	3	
	2	EE4149	Probabilistic Systems Analysis and Applied Probability	C	2	0	3	3	
	3	EE4192	Project Phase I	SPL	0	0	6	3	
	4	EE41XX	Technical Elective – I	E	X	X	X	3	
	5	EE41XX	Technical Elective – II	E	X	X	X	3	
			Total		4	0	12	15	
	SEMESTER 2								
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3	
	2	GE4206	Professional Ethics and Values	C	2	2	0	3	
	3	EE4293	Project Phase II	SPL	0	0	6	3	
	4	EE42XX	Technical Elective – III	E	X	X	X	3	
	5	EE42XX	Technical Elective – IV	E	X	X	X	3	
			Total		4	4	6	15	
			GRAND TOTAL		91	18	108	141	

Specialisations

Power Systems Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4147	Advanced Power Generation, Transmission and Distribution	E	2	0	2	3
2	EE4148	Power System Operation and Control	E	2	0	2	3
3	EE4246	Electric Power Systems Analysis and Design	E	2	0	2	3
4	EE4250	Power System Protection and Switchgear	E	2	0	2	3

Radio Frequency and Microwaves Circuits Design							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4156	Microwave Engineering	E	2	0	3	3

2	EE4159	Radio Frequency (RF) Circuits Design	E	2	0	3	3
3	EE4249	Optoelectronic Devices	E	2	0	3	3
4	EE4253	VLSI Design	E	2	0	3	3

Intelligent Systems: Robotics and Mechatronics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4145	Advanced Control Systems	E	2	0	3	3
2	EE4177	Industrial Automation and Robotics	E	2	0	3	3
3	EE4241	Artificial Intelligence and Robotics	E	2	0	3	3
4	EE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Intelligent Systems: Controls and Automation							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4145	Advanced Control Systems	E	2	0	3	3
2	CS2235	Computer Architecture and Organisation	E	2	0	3	3
3	EE4241	Artificial Intelligence and Robotics	E	2	0	3	3
4	EE4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Biomedical Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4183	Biomedical Instrumentation	E	2	0	3	3
2	EE4184	Biomedical Signal Analysis	E	2	0	3	3
3	EE4251	Real-Time Digital Signal Processing	E	2	0	3	3
4	EE4259	Wireless Sensor Networks	E	2	0	3	3

Renewable Energy Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4150	Smart Grid	E	2	0	3	3
2	EE4151	Solid State Electronic Devices	E	2	0	3	3
3	EE4247	Energy Management for a Sustainable Future	E	2	0	3	3
4	EE4248	Green Electronics	E	2	0	3	3

C. BSC Electronics and Communications Engineering

Course Diet for levels 100, 200, 300 and 400

Electronics and Communications Engineering (EC) Programme									
TOTAL PROGRAMME CREDITS						147			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	GE1108	Technology and Society	C	1	2	0	2	
			Total		15	4	15	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	2	EC1245	Basic Electronics	C	2	0	3	3	
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2	
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	6	GE1206	Programming in C	C	2	0	3	3	
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3	
	8	UC1203	Text and Meaning	M	1	2	0	2	
			Total		13	4	15	18	

Electronics and Communications Engineering (EC) Programme								
Year 2 / Level 200	SEMESTER 1							
	1	EC2155	Analog Communication	C	2	0	3	3
	2	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	3	EC2145	Circuit Theory	C	2	2	0	3
	4	EC2147	Electromagnetic Fields and Waves Theory	C	2	0	3	3
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	6	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3
	7	UC2102	Leadership Seminar I	M	2	0	0	0
			Total		14	2	12	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	3	EC2240	Data Communication and Computer Networks	C	2	0	3	3
	4	EC2245	Electrical Machines	C	2	0	3	3
	5	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	6	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	7	EE4151	Solid State Electronic Devices	C	2	0	3	3
			Total		13	2	15	19
Year 3 / Level 300	SEMESTER 1							
	1	MT3103	Differential Equations (with MATLAB)	C	2	0	3	3
	2	EC3150/55	Digital Communication	C	2	0	3	3
	3	EC3145	Digital Systems Design	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3

Electronics and Communications Engineering (EC) Programme								
	6	EC3147	Signals and Systems	C	2	0	3	3
	7	GE3105	Systems Dynamics	C	2	0	0	2
			Total		14	0	15	17
	SEMESTER 2							
	1	EC3255	Antennas and Wave Propagation	C	2	0	3	3
	2	EC3245	Automatic Control Systems	C	2	0	3	3
	3	EC3256	Digital Signal Processing	C	2	0	3	3
	4	EC3248	Microprocessors and Microcontrollers	C	2	0	3	3
	5	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	2	0	3
	6	EC3258	Telecommunications Switching and Networks	C	2	0	3	3
			Total		12	2	15	18
		EC3291	Industry Internship	SPL	0	0	0	2
			Total		0	0	0	2
	SEMESTER 1							
Year 4 / Level 400	1	EC4146	Advanced Digital Signal Processing	C	2	0	3	3
	2	EC4156	Microwave Engineering	C	2	0	3	3
	3	EC4157	Mobile Communication	C	2	0	3	3
	4	EC4158	Optical Communication	C	2	0	3	3
	5	EC4192	Project Phase I	SPL	0	0	6	3
	6	EC4159	Remote Sensing	C	2	0	3	3
			Total		10	0	21	18
	SEMESTER 2							
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3

Electronics and Communications Engineering (EC) Programme								
	3	EC4293	Project Phase II	SPL	0	0	6	3
	4	EC4251	Real-Time Digital Signal Processing	C	2	0	3	3
	5	EC4257	Satellite Communication	C	2	0	3	3
	6	EC4258	Telecommunication System Modelling and Simulation	C	2	0	3	3
			Total		10	4	12	18
			GRAND TOTAL		101	18	120	147

Specialisations

Communication							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EC4146	Advanced Digital Signal Processing	E	2	0	3	3
2	EC4155	High Speed Networks	E	2	0	3	3
3	EC4256	Remote Sensing	E	2	0	3	3
4	EC4258	Telecommunication System Modelling and Simulation	E	2	0	3	3

Electronics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EC4146	Advanced Digital Signal Processing	E	2	0	3	3
2	EC4152	Advanced Microprocessors	E	2	0	3	3
3	EC4245	Consumer Electronics	E	2	0	3	3
4	EC4253	VLSI Design	E	2	0	3	3

3.2.3.2. Department of Mechanical, Industrial & Biomedical Engineering

A. BSC Mechanical Engineering

Course Diet for levels 100, 200 and 300

Mechanical Engineering (ME) Programme									
TOTAL PROGRAMME CREDITS						150			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	UC1104	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	3	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	UC1105	Technology and Society	C	1	2	0	2	
			Total		16	4	15	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	2	ME1270	Engineering Mechanics	C	2	0	3	3	
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2	
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	6	GE1206	Programming in C	C	2	0	3	3	
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3	
	8	UC1203	Text and Meaning	M	1	2	0	2	

Mechanical Engineering (ME) Programme									
			Total		13	4	15	18	
Year 2 / Level 200	SEMESTER 1								
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3	
	2	ME2170	Computer Aided Design and Manufacturing (CAD and CAM)	C	2	0	3	3	
	3	ME2149	Electronics and Microprocessors	C	2	0	3	3	
	4	ME2171	Engineering Thermodynamics	C	2	0	3	3	
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2	
	6	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3	
	7	UC2102	Leadership Seminar I	M	2	0	0	0	
			Total		14	0	15	17	
	SEMESTER 2								
	1	UC2201	African Studies	M	1	2	0	2	
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3	
	3	ME2270	Fluid Mechanics	C	2	0	3	3	
	4	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2	
	5	ME2271	Manufacturing Processes I	C	2	0	3	3	
	6	ME2272	Mechanics of Machines I	C	2	0	3	3	
	7	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3	
			Total		13	2	15	19	
Year 3 / Level 300	SEMESTER 1								
	1	MT3103	Differential Equations (with MATLAB)	C	2	0	3	3	
	2	UC3101	Leadership Seminar II	M	2	0	0	0	
	3	ME3170	Machine Design	C	2	0	3	3	

Mechanical Engineering (ME) Programme								
	4	ME3171	Manufacturing Processes II	C	2	0	3	3
	5	ME3172	Mechanics of Machines II	C	2	0	3	3
	6	ME3173	Mechanics of Materials	C	2	0	3	3
	7	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3
	8	GE3105	Systems Dynamics	C	2	0	0	2
			Total		16	0	18	20
	SEMESTER 2							
	1	ME3270	Applied Hydraulics and Pneumatics	C	2	0	3	3
	2	ME3245	Automatic Control System	C	2	0	3	3
	3	ME3271	Gas Dynamics and Jet Propulsion	C	2	0	3	3
	4	ME3291	Industry Internship	SPL	0	0	0	2
	5	ME3272	Internal Combustion Engines and Steam Turbine	C	2	0	3	3
	6	ME3273	Mechatronics	C	2	0	3	3
	7	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
			Total		12	0	18	20
Year 4 / Level 400	SEMESTER 1							
		ME4177	Industrial Automation and Robotics	C	2	0	3	3
		ME4192	Project Phase I	SPL	0	0	6	3
	4	ME4163	Quality Control and Reliability Engineering	C	2	2	0	3
	5	ME41XX	Technical Elective – I	E	X	X	X	3
	6	ME41XX	Technical Elective – II	E	X	X	X	3
	7	ME4179	Thermal Engineering	C	2	0	3	3
			Total		6	2	12	18
	SEMESTER 2							

Mechanical Engineering (ME) Programme								
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	ME4274	Maintenance Engineering	C	2	0	3	3
	3	GE4206	Professional Ethics and Values	C	2	2	0	3
	4	ME4293	Project Phase II	SPL	0	0	6	3
	6	ME42XX	Technical Elective – III	E	X	X	X	3
	7	ME42XX	Technical Elective – IV	E	X	X	X	3
			Total		6	4	9	18
			GRAND TOTAL		96	16	117	150

Specialisations

Aerospace Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4145	Advanced Control Systems	E	2	0	3	3
2	ME4171	Computational Fluid Mechanics	E	2	0	3	3
3	ME4271	Composite Materials and Structures	E	2	0	3	3
4	ME4275	Mechanical Vibrations	E	2	0	3	3

Biomedical Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4181	Biofluid Mechanics	E	2	0	3	3
2	ME4182	Biomechanics	E	2	0	3	3
3	ME4281	Biomaterials	E	2	0	3	3
4	ME4282	Rehabilitation Engineering	E	2	0	3	3

Design and Manufacturing							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4172	Design of Jigs, Fixtures and Tools	E	2	0	3	3
2	ME4180	Unconventional Machining Process	E	2	0	3	3
3	ME4271	Composite Materials and Structures	E	2	0	3	3
4	ME4272	Computer Integrated Manufacturing	E	2	0	3	3

Energy Systems							
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S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4176	Heat and Mass Transfer	E	2	0	3	3
2	ME4178	Refrigeration and Air Conditioning	E	2	0	3	3
3	ME4270	Renewable Energy	E	2	0	3	3
4	ME4277	Thermal Turbo Machines	E	2	0	3	3

Mechanical Design							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4170	Advanced CAD and CAM	E	2	0	3	3
2	ME4173	Design of Machine Elements	E	2	0	3	3
3	ME4172	Design of Jigs, Fixtures and Tools	E	2	0	3	3
4	ME4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Robotics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4170	Advanced CAD and CAM	E	2	0	3	3
2	ME4174	Design of Transmission Systems	E	2	0	3	3
3	EE4145	Advanced Control Systems	E	2	0	3	3
4	ME4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Thermo-Fluids Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4171	Computational Fluid Dynamics	E	2	0	3	3
2	ME4178	Refrigeration and Air Conditioning	E	2	0	3	3
3	ME4273	Fluid Machinery	E	2	0	3	3
4	ME4176	Heat and Mass Transfer	E	2	0	3	3

Course Diet for level 400

Mechanical Engineering (ME) Programme									
TOTAL PROGRAMME CREDITS						150			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	

Mechanical Engineering (ME) Programme								
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0
	4	GE1105	Introduction to Engineering	C	2	0	3	3
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3
	6	GE1107	Physical Sciences	C	2	0	3	3
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
	8	GE1108	Technology and Society	C	1	2	0	2
			Total		15	4	15	20
	SEMESTER 2							
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3
	2	ME1270	Engineering Mechanics	C	2	0	3	3
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2
	6	GE1206	Programming in C	C	2	0	3	3
	7	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3
	8	UC1203	Text and Meaning	M	1	2	0	2
			Total		13	4	15	18
Year 2 / Level 200	SEMESTER 1							
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	2	ME2170	Computer Aided Design and Manufacturing (CAD and CAM)	C	2	0	3	3
	3	ME2149	Electronics and Microprocessors	C	2	0	3	3
	4	ME2171	Engineering Thermodynamics	C	2	0	3	3

Mechanical Engineering (ME) Programme								
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	6	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3
	7	UC2102	Leadership Seminar I	M	2	0	0	0
			Total		14	0	15	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	3	ME2270	Fluid Mechanics	C	2	0	3	3
	4	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	5	ME2271	Manufacturing Processes I	C	2	0	3	3
	6	ME2272	Mechanics of Machines I	C	2	0	3	3
	7	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
			Total		13	2	15	19
	SEMESTER 1							
Year 3 / Level 300	1	MT3103	Differential Equations (with MATLAB)	C	2	0	3	3
	2	UC3101	Leadership Seminar II	M	2	0	0	0
	3	ME3170	Machine Design	C	2	0	3	3
	4	ME3171	Manufacturing Processes II	C	2	0	3	3
	5	ME3172	Mechanics of Machines II	C	2	0	3	3
	6	ME3173	Mechanics of Materials	C	2	0	3	3
	7	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3
	8	GE3105	Systems Dynamics	C	2	0	0	2
			Total		16	0	18	20

Mechanical Engineering (ME) Programme								
	SEMESTER 2							
	1	ME3270	Applied Hydraulics and Pneumatics	C	2	0	3	3
	2	ME3245	Automatic Control System	C	2	0	3	3
	3	ME3271	Gas Dynamics and Jet Propulsion	C	2	0	3	3
	4	ME3291	Industry Internship	SPL	0	0	0	2
	5	ME3272	Internal Combustion Engines and Steam Turbine	C	2	0	3	3
	6	ME3273	Mechatronics	C	2	0	3	3
	7	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
			Total		12	0	18	20
Year 4 / Level 400	SEMESTER 1							
	1	ME4177	Industrial Automation and Robotics	C	2	0	3	3
	2	ME4192	Project Phase I	SPL	0	0	6	3
	3	ME4163	Quality Control and Reliability Engineering	C	2	2	0	3
	4	ME41XX	Technical Elective – I	E	X	X	X	3
	5	ME41XX	Technical Elective – II	E	X	X	X	3
	6	ME4179	Thermal Engineering	C	2	0	3	3
			Total		6	2	12	18
	SEMESTER 2							
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	ME4274	Maintenance Engineering	C	2	0	3	3
	3	GE4206	Professional Ethics and Values	C	2	2	0	3
	4	ME4293	Project Phase II	SPL	0	0	6	3
	6	ME42XX	Technical Elective – III	E	X	X	X	3
	7	ME42XX	Technical Elective – IV	E	X	X	X	3

Mechanical Engineering (ME) Programme									
			Total		6	4	9	18	
			GRAND TOTAL		95	16	117	150	

Specialisations

Aerospace Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	EE4145	Advanced Control Systems	E	2	0	3	3
2	ME4171	Computational Fluid Mechanics	E	2	0	3	3
3	ME4271	Composite Materials and Structures	E	2	0	3	3
4	ME4275	Mechanical Vibrations	E	2	0	3	3

Biomedical Engineering							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4181	Biofluid Mechanics	E	2	0	3	3
2	ME4182	Biomechanics	E	2	0	3	3
3	ME4281	Biomaterials	E	2	0	3	3
4	ME4282	Rehabilitation Engineering	E	2	0	3	3

Design and Manufacturing							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4172	Design of Jigs, Fixtures and Tools	E	2	0	3	3
2	ME4180	Unconventional Machining Process	E	2	0	3	3
3	ME4271	Composite Materials and Structures	E	2	0	3	3
4	ME4272	Computer Integrated Manufacturing	E	2	0	3	3

Energy Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4176	Heat and Mass Transfer	E	2	0	3	3
2	ME4178	Refrigeration and Air Conditioning	E	2	0	3	3
3	ME4270	Renewable Energy	E	2	0	3	3
4	ME4277	Thermal Turbo Machines	E	2	0	3	3

Mechanical Design							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C

1	ME4170	Advanced CAD and CAM	E	2	0	3	3
2	ME4173	Design of Machine Elements	E	2	0	3	3
3	ME4172	Design of Jigs, Fixtures and Tools	E	2	0	3	3
4	ME4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Robotics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4170	Advanced CAD and CAM	E	2	0	3	3
2	ME4174	Design of Transmission Systems	E	2	0	3	3
3	EE4145	Advanced Control Systems	E	2	0	3	3
4	ME4276	Modelling and Analysis of Mechatronic Systems	E	2	0	3	3

Thermo-Fluids Systems							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	ME4171	Computational Fluid Dynamics	E	2	0	3	3
2	ME4178	Refrigeration and Air Conditioning	E	2	0	3	3
3	ME4273	Fluid Machinery	E	2	0	3	3
4	ME4176	Heat and Mass Transfer	E	2	0	3	3

B. BSC Robotics Engineering

Course Diet for levels 100, 200 and 300

Robotics Engineering (RE) Programme									
TOTAL PROGRAMME CREDITS						153			
Year / Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	UC1104	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	UC1105	Technology and Society	C	1	2	0	2	
	8	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
			Total		15	4	15	20	
	SEMESTER 2								
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	2	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	3	UC1203	Text and Meaning	M	1	2	0	2	
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2	
	5	GE1206	Programming in C	C	2	0	3	3	
	6	GE1207	Sensors, Measurements and Instrumentation	C	2	0	3	3	
	7	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	8	RE1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3	
	9	RE1270	Engineering Mechanics	C	2	0	3	3	

Robotics Engineering (RE) Programme									
			Total		15	4	18	21	
Year 2 / Level 200	SEMESTER 1								
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2	
	2	UC2102	Leadership Seminar I	M	2	0	0	0	
	3	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3	
	4	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3	
	5	RE2141	Artificial Intelligence and Robotics	C	2	0	3	3	
	6	RE2145	Circuit Theory	C	2	0	3	3	
	7	RE2170	Computer-Aided Design and Manufacturing (CAD/CAM)	C	2	0	3	3	
	8	RE2173	Mechanics of Materials	C	2	0	3	3	
			Total		16	0	18	20	
	SEMESTER 2								
	1	UC2201	African Studies	M	1	2	0	2	
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2	
	3	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3	
	4	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3	
	5	RE2222	Analogue, Digital Electronics and Linear Integrated Circuits	C	2	0	3	3	
	6	RE2270	Fluid Mechanics	C	2	0	3	3	
	7	RE2221	Unified Robotics I: Actuation	C	2	0	3	3	
			Total		13	2	15	19	
Year 3 / Level 300	SEMESTER 1								
	1	UC3101	Leadership Seminar II	M	2	0	0	0	
	2	GE3105	System Dynamics	C	2	0	0	2	

Robotics Engineering (RE) Programme								
	3	MT3107	Differential Equations and Numerical Methods (with MATLAB)	C	2	0	3	3
	4	RE3121	Machine Design	C	2	0	3	3
	5	RE3126	Microprocessors and Microcontrollers	C	2	0	3	3
	6	RE3147	Signals and Systems	C	2	0	3	3
	7	RE3122	Unified Robotics II: Sensing	C	2	0	3	3
	8	RE3123	Wireless Sensor Networks	C	2	0	3	3
			Total		16	0	18	20
	SEMESTER 2							
	1	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	2	RE3245	Automatic Control Systems	C	2	0	3	3
	3	RE3256	Digital Signal Processing	C	2	0	3	3
	4	RE3247	Embedded Systems	C	2	0	3	3
	5	RE3228	Machine Learning	C	2	2	0	3
	6	RE3222	Machines and Drives	C	2	0	3	3
	7	RE3223	Unified Robotics III: Manipulation	C	2	2	0	3
			Total		14	4	15	21
Year 4 / Level 400	SEMESTER 1							
	1	RE4121	Advanced Instrumentation	C	2	0	3	3
	2	RE4125	Autonomous Agents	C	2	0	3	3
	3	RE4123	Computer Vision	C	2	0	3	3
	4	RE4120	Industrial Robotics	C	2	0	3	3
	5	RE4192	Project Phase I	SPL	0	2	6	3
	6	RE4124	Unified Robotics IV: Navigation	C	2	0	3	3

Robotics Engineering (RE) Programme								
			Total		10	2	21	18
			SEMESTER 2					
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3
	3	RE4276	Modelling and Analysis of Mechatronic Systems	C	2	2	0	3
	4	RE4293	Project Phase II	SPL	0	2	6	3
	5	RE4191	Industry Internship	SPL	0	4	0	2
			Total		6	12	6	14
			GRAND TOTAL		105	28	126	153

Course Diet for level 400

Robotics Engineering (RE) Programme								
TOTAL PROGRAMME CREDITS					156			
Year / Level	S/N	Course Code	Course Name	Cat	L	T	P	C
Year 1 / Level 100			SEMESTER 1					
	1	UC1101	Communication Skills	M	2	0	3	3
	2	UC1102	French Language	M	2	2	0	3
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0
	4	GE1105	Introduction to Engineering	C	2	0	3	3
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3
	6	GE1107	Physical Sciences	C	2	0	3	3
	7	GE1108	Technology and Society	C	1	2	0	2
	8	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
			Total		15	4	15	20
			SEMESTER 2					

Robotics Engineering (RE) Programme								
	1	UC2201	African Studies	M	1	2	0	2
	2	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	3	UC1202	Logic and Critical Thinking	M	1	2	0	2
	4	UC1203	Text and Meaning	M	1	2	0	2
	5	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2
	6	GE1206	Programming in C	C	2	0	3	3
	7	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3
	8	RE1245	Circuit Theory	C	2	0	3	3
	9	RE1270	Engineering Mechanics	C	2	0	3	3
			Total		14	6	15	20
Year 2 / Level 200	SEMESTER 1							
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	2	UC2102	Leadership Seminar I	M	2	0	0	0
	3	GE2105	Introduction to Material Science and Engineering	C	2	0	3	3
	4	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	5	RE2141	Artificial Intelligence and Robotics	C	2	2	0	3
	6	RE2145	Basic Electronics	C	2	0	3	3
	7	RE2170	Computer-Aided Design and Manufacturing (CAD/CAM)	C	2	0	3	3
	8	RE2173	Mechanics of Materials	C	2	0	3	3
			Total		16	2	15	20
	SEMESTER 2							
	1	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	2	GE2207	Sensors, Measurements and Instrumentation	C	2	0	3	3
	3	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3

Robotics Engineering (RE) Programme								
	4	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	5	RE2222	Analogue, Digital Electronics and Linear Integrated Circuits	C	2	0	3	3
	6	RE2270	Fluid Mechanics	C	2	0	3	3
	7	RE2221	Unified Robotics I: Actuation	C	2	0	3	3
			Total		14	0	18	20
Year 3 / Level 300	SEMESTER 1							
	1	UC3101	Leadership Seminar II	M	2	0	0	0
	2	GE3105	System Dynamics	C	2	0	0	2
	3	MT3107	Differential Equations and Numerical Methods (with MATLAB)	C	2	0	3	3
	4	RE3121	Machine Design	C	2	0	3	3
	5	RE3126	Microprocessors and Microcontrollers	C	2	0	3	3
	6	RE3147	Signals and Systems	C	2	0	3	3
	7	RE3122	Unified Robotics II: Sensing	C	2	0	3	3
	8	RE3123	Wireless Sensor Networks	C	2	0	3	3
			Total		16	0	18	20
	SEMESTER 2							
	1	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	2	RE3245	Automatic Control Systems	C	2	0	3	3
	3	RE3256	Digital Signal Processing	C	2	0	3	3
	4	RE3247	Embedded Systems	C	2	0	3	3
	5	RE3228	Machine Learning	C	2	2	0	3
	6	RE3222	Machines and Drives	C	2	0	3	3
	7	RE3223	Unified Robotics III: Manipulation	C	2	2	0	3

Robotics Engineering (RE) Programme									
			Total		14	4	15	21	
Year 4 / Level 400	SEMESTER 1								
	1	RE4121	Advanced Instrumentation	C	2	0	3	3	
	2	RE4125	Autonomous Agents	C	2	0	3	3	
	3	RE4123	Computer Vision	C	2	0	3	3	
	4	RE4120	Industrial Robotics	C	2	0	3	3	
	5	RE4191	Industry Internship	SPL	0	0	0	2	
	6	RE4192	Project Phase I	SPL	0	0	6	3	
	7	RE4124	Unified Robotics IV: Navigation	C	2	0	3	3	
			Total		10	0	21	20	
	SEMESTER 2								
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3	
	2	GE4206	Professional Ethics and Values	C	2	2	0	3	
	3	RE4276	Modelling and Analysis of Mechatronic Systems	C	2	2	0	3	
	4	RE4293	Project Phase II	SPL	0	0	6	3	
	5	RE4251	Real-Time Digital Signal Processing	C	2	2	0	3	
			Total		8	8	6	15	
			GRAND TOTAL		107	24	123	156	

C. BSC Industrial and Systems Engineering

Course Diet for levels 100, 200, 300 and 400

Industrial and Systems Engineering (IE) Programme									
TOTAL PROGRAMME CREDITS					145				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1105	Introduction to Engineering	C	2	0	3	3	
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	GE1108	Technology and Society	C	1	2	0	2	
			Total		15	4	15	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	M	2	0	3	3	
	2	IE1270	Engineering Mechanics	C	2	0	3	3	
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	4	IE1260	Introduction to Industrial and Systems Engineering	C	2	0	3	3	
	5	GE1205	Introduction to Multidisciplinary Design	M	1	0	3	2	
	6	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	7	GE1207	Sensors, Measurements and Instrumentation	M	2	0	3	3	
	8	UC1203	Text and Meaning	M	1	2	0	2	
			Total		13	4	15	18	

Industrial and Systems Engineering (IE) Programme								
Year 2 / Level 200	SEMESTER 1							
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	M	2	0	3	3
	2	IE2170	Computer-Aided Design and Manufacturing (CAD and CAM)	C	2	0	3	3
	3	IE2160	Computing in Industrial and Systems Engineering	C	2	0	3	3
	4	IE2148	Electricity and Optics	C	2	0	3	3
	5	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	6	GE2105	Introduction to Material Science and Engineering	M	2	0	3	3
	7	UC2102	Leadership Seminar I	M	2	0	0	0
			Total		14	0	15	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	MT2202	Applied Linear Algebra (with MATLAB)	M	2	0	3	3
	3	IE2260	Data Management for Industrial and Systems Engineers (ISEs)	C	2	0	3	3
	4	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	5	IE2271	Manufacturing Processes I	C	2	0	3	3
	6	MT2204	Probability, Statistics and Reliability (with MATLAB)	M	2	0	3	3
	7							
			Total		11	2	12	16
Year 3 / Level 300	SEMESTER 1							
	1	IE3160	Design of Experiments	C	2	2	0	3
	2	IE3161	Deterministic Operations Research - Optimisation	C	2	0	3	3
	3	MT3103	Differential Equations (with MATLAB)	M	2	0	3	3

Industrial and Systems Engineering (IE) Programme									
	4	IE3162	Production Planning and Inventory Control	C	2	2	0	3	
	5	UC3101	Leadership Seminar II	M	2	0	0	0	
	6	IE3171	Manufacturing Processes II	C	2	0	3	3	
	7	IE3173	Mechanics of Materials	C	2	0	3	3	
			Total		14	4	12	18	
	SEMESTER 2								
	1	IE3261	Discrete-Event Computer Simulation	C	2	0	3	3	
	2	IE3263	Human Factors and Ergonomics	C	2	0	3	3	
	3	IE3260	Industrial Ergonomics and Work Measurements	C	2	0	3	3	
	4	IE3291	Industry Internship	SPL	0	0	0	2	
	5	IE3262	Probabilistic Operations Research - Stochastic Models	C	2	0	3	3	
	6	GE3205	Project Management, Engineering Economics and Risk Analysis	M	2	0	3	3	
	7	IE3264	Statistical Quality Control	C	2	0	3	3	
			Total		12	0	18	20	
Year 4 / Level 400	SEMESTER 1								
	1	IE4177	Industrial Automation and Robotics	C	2	0	3	3	
	2	IE4161	Lean Manufacturing	C	2	0	3	3	
	3	IE4162	Logistics Engineering	C	2	0	3	3	
	4	IE4192	Project Phase I	SPL	0	0	6	3	
	5	IE41XX	Technical Elective I	E	X	X	X	3	
	6	IE41XX	Technical Elective II	E	X	X	X	3	
			Total		6	0	15	18	
	SEMESTER 2								
	1	GE4205	Environmental Science and Engineering	M	2	2	3	3	

Industrial and Systems Engineering (IE) Programme								
	2	IE4267	Occupational Safety and Hazard Control	C	2	2	0	3
	3	GE4206	Professional Ethics and Values	M	2	2	3	3
	4	IE4293	Project Phase II	SPL	0	0	6	3
	5	IE42XX	Technical Elective III	E	X	X	X	3
	6	IE42XX	Technical Elective IV	E	X	X	X	3
			Total		6	6	12	18
			Grand Total		91	20	114	145

Specialisations

Advanced Manufacturing							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IE4189	Micro and Nano Manufacturing	E	2	0	3	3
2	IE4190	Welding Engineering	E	2	0	3	3
3	IE4264	Digital Manufacturing	E	2	0	3	3
4	IE4266	Laser Processing	E	2	0	3	3

Automated Manufacturing and Integration							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IE4187	Computer Control of Manufacturing Processes	E	2	0	3	3
2	IE4188	Industrial Robotics and Flexible Assembly	E	2	0	3	3
3	IE4265	Industrial Control Systems	E	2	0	3	3
4	IE4268	Optimization of Large Systems	E	2	0	3	3

Computer-Aided Design and Manufacturing							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IE4170	Advanced CAD and CAM	E	2	0	3	3
2	IE4186	Computer Aided Design and Prototyping	E	2	0	3	3
3	IE4261	Advanced Manufacturing Processes and Practices Quality Control	E	2	0	3	3
4	IE4263	Design for Manufacturability	E	2	0	3	3

Manufacturing Processes, Systems and Planning							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IE4185	Advanced Manufacturing Processes	E	2	0	3	3
2	IE4160	Integrated Production Systems	E	2	0	3	3
3	IE4260	Advanced Manufacturing Operations	E	2	0	3	3
4	IE4240	Artificial Intelligence and Expert Systems	E	2	0	3	3

3.2.3.3. Department of Biomedical Engineering

A. BSC Biomedical Engineering

Course Diet for levels 100, 200 and 300

Biomedical Engineering (BE) Programme									
TOTAL PROGRAMME CREDITS							158		
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	0	3	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	UC1104	Introduction to Programming with Python	M	2	0	3	3	
	5	UC1105	Technology and Society	M	2	2	0	2	
	6	GE1109	Physics I: Mechanics	C	2	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	BE1181	Introduction to Biomedical Engineering	C	2	0	3	3	
			Total		16	2	18	20	
	SEMESTER 2								
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	2	UC1202	Logic and Critical Thinking	M	2	0	0	2	

Biomedical Engineering (BE) Programme									
	3	UC1203	Text and Meaning	M	2	0	0	2	
	4	GE1205	Introduction to Multidisciplinary Design	C	1	0	3	2	
	5	GE1206	Programming in C	C	2	0	3	3	
	6	GE1209	Physics II: Electromagnetic Field Theory	C	2	0	3	3	
	7	GE1208	Principles of Chemistry I	C	2	0	3	3	
	8	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	9	BE1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3	
			Total		17	0	18	21	
Year 2 / Level 200	SEMESTER 1								
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2	
	2	UC2102	Leadership Seminar I	M	2	0	0	0	
	3	GE2109	Physics III: Optics	C	2	0	3	3	
	4	GE2108	Principles of Chemistry II	C	2	0	3	3	
	5	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3	
	6	BE2145	Circuit Theory	C	2	0	3	3	
	7	BE2170	Computer Aided Design and Manufacturing (CAD and CAM)	C	2	0	3	3	
	8	BE2171	Engineering Thermodynamics	C	2	0	3	3	
			Total		16	0	18	20	
	SEMESTER 2								
	1	UC2201	African Studies	M	2	0	0	2	
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2	
	3	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3	
	4	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3	
	5	BE2249	Analogue and Digital Electronics	C	2	0	3	3	

Biomedical Engineering (BE) Programme									
	6	BE2281	Human Anatomy and Physiology	C	2	0	3	3	
	7	BE2282	Introduction to Artificial Intelligence and Robotics	C	2	0	3	3	
	8	BE2283	Introduction to Organic Chemistry	C	1	0	3	2	
			Total		15	0	18	21	
Year 3 / Level 300	SEMESTER 1								
	1	UC3101	Leadership Seminar II	M	2	0	0	0	
	2	GE3105	System Dynamics	C	2	0	0	2	
	3	MT3103	Differential Equations (with MATLAB)	C	2	0	3	3	
	4	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3	
	5	BE3181	Biochemistry	C	2	0	3	3	
	6	BE3182	Cell and Molecular Biology	C	2	0	3	3	
	7	BE3183	Sensor and Bioinstrumentation I	C	2	0	3	3	
	8	BE3147	Signals and Systems	C	2	0	3	3	
			Total		16	0	18	20	
	SEMESTER 2								
	1	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3	
	2	BE3281	Biomaterials	C	2	0	3	3	
	3	BE3282	Biomedical Imaging and Sensing	C	2	0	3	3	
	4	BE3256	Digital Signal Processing	C	2	0	3	3	
	5	BE3291	Industry Internship	SPL	0	0	6	2	
	6	BE3299	Research Methodology	C	2	0	3	3	
	7	BE3283	Sensor and Bioinstrumentation II	C	2	0	3	3	
			Total		12	0	24	20	
SEMESTER 1									

Biomedical Engineering (BE) Programme									
Year 4 / Level 400	1	BE4181	Biomechanics	C	2	0	3	3	
	2	BE4182	Biomedical Data Analysis with AI	C	2	0	3	3	
	3	BE4183	Medical Devices and Technologies	C	2	0	3	3	
	4	BE4192	Project Phase I	SPL	0	1	6	3	
	5	BE4184	Quantitative Physiology	C	2	0	3	3	
	6	BE4185	Rehabilitation Engineering	C	2	0	3	3	
			Total		10	1	21	18	
	SEMESTER 2								
	1	GE4205	Environmental Science and Engineering	C	3	2	0	3	
	2	GE4206	Professional Ethics and Values	C	3	2	0	3	
	3	BE4281	Advances in Imaging Technologies: NeuroImaging	C	2	0	3	3	
	4	BE4282	Medical Image Processing	C	2	0	3	3	
	5	BE4293	Project Phase II	SPL	0	1	6	3	
	6	BE4251	Real-Time Digital Signal Processing	C	2	0	3	3	
			Total		12	5	15	18	
			GRAND TOTAL		114	8	150	158	

Course Diet for level 400

Biomedical Engineering (BE) Programme									
TOTAL PROGRAMME CREDITS					158				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	

Biomedical Engineering (BE) Programme								
	4	GE1106	Introduction to Programming with Python	C	2	0	3	3
	5	GE1108	Technology and Society	C	1	2	0	2
	6	GE1109	Physics I: Mechanics	C	2	0	3	3
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
	8	BE1181	Introduction to Biomedical Engineering	C	2	0	3	3
			Total		15	4	15	20
	SEMESTER 2							
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	2	UC1202	Logic and Critical Thinking	M	1	2	0	2
	3	UC1203	Text and Meaning	M	1	2	0	2
	4	GE1205	Introduction to Multidisciplinary Design	M	1	2	0	2
	5	GE1206	Programming in C	C	2	0	3	3
	6	GE1209	Physics II: Electromagnetic Field Theory	C	2	0	3	3
	7	GE1208	Principles of Chemistry I	C	2	0	3	3
	8	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3
	9	BE1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3
			Total		15	6	15	21
Year 2 / Level 200	SEMESTER 1							
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	2	UC2102	Leadership Seminar I	M	2	0	0	0
	3	GE2109	Physics III: Optics	C	2	0	3	3
	4	GE2108	Principles of Chemistry II	C	2	0	3	3
	5	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	6	BE2145	Circuit Theory	C	2	0	3	3

Biomedical Engineering (BE) Programme								
	7	BE2170	Computer Aided Design and Manufacturing (CAD and CAM)	C	2	0	3	3
	8	BE2171	Engineering Thermodynamics	C	2	0	3	3
			Total		16	0	18	20
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	3	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	4	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	5	BE2249	Analogue and Digital Electronics	C	2	0	3	3
	6	BE2281	Human Anatomy and Physiology	C	2	0	3	3
	7	BE2282	Introduction to Artificial Intelligence and Robotics	C	2	0	3	3
Year 3 / Level 300	8	BE2283	Introduction to Organic Chemistry	C	1	0	3	2
			Total		13	2	15	21
	SEMESTER 1							
	1	UC3101	Leadership Seminar II	M	2	0	0	0
	2	GE3105	System Dynamics	C	2	0	0	2
	3	MT3103	Differential Equations (with MATLAB)	C	2	0	3	3
	4	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3
	5	BE3181	Biochemistry	C	2	0	3	3
	6	BE3182	Cell and Molecular Biology	C	2	0	3	3
	7	BE3183	Sensor and Bioinstrumentation I	C	2	0	3	3
	8	BE3147	Signals and Systems	C	2	0	3	3
			Total		14	0	15	20
	SEMESTER 2							

Biomedical Engineering (BE) Programme								
	1	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	2	BE3281	Biomaterials	C	2	0	3	3
	3	BE3282	Biomedical Imaging and Sensing	C	2	0	3	3
	4	BE3256	Digital Signal Processing	C	2	0	3	3
	5	BE3291	Industry Internship	SPL	0	0	6	2
	6	BE3299	Research Methodology	C	2	0	3	3
	7	BE3283	Sensor and Bioinstrumentation II	C	2	0	3	3
			Total		12	0	24	20
Year 4 / Level 400	SEMESTER 1							
	1	BE4181	Biomechanics	C	2	0	3	3
	2	BE4182	Biomedical Data Analysis with AI	C	2	0	3	3
	3	BE4183	Medical Devices and Technologies	C	2	0	3	3
	4	BE4192	Project Phase I	SPL	0	1	6	3
	5	BE4184	Quantitative Physiology	C	2	0	3	3
	6	BE4185	Rehabilitation Engineering	C	2	0	3	3
			Total		10	1	21	18
	SEMESTER 2							
	1	GE4205	Environmental Science and Engineering	C	2	2	0	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3
	3	BE4281	Advances in Imaging Technologies: NeuroImaging	C	2	0	3	3
	4	BE4282	Medical Image Processing	C	2	0	3	3
	5	BE4293	Project Phase II	SPL	0	1	6	3
	6	BE4251	Real-Time Digital Signal Processing	C	2	0	3	3
			Total		8	5	12	18

Biomedical Engineering (BE) Programme								
			GRAND TOTAL		103	18	135	158

3.3. Faculty of Computational Science & Informatics

3.3.1. Message from the Ag. Dean

Dear Students, Faculty, and Members of the Academic Community,

Welcome to the academic catalogue for the 2024/25 academic year at ACity. As the Ag. Dean of the Faculty of Computational Science and Informatics, I am pleased to share our vision and offerings designed to empower the next generation of innovators and problem solvers.

In an era where technology drives nearly every aspect of our lives, computational science and informatics are at the forefront of transformative change. Our programs are designed to equip you with the knowledge and skills necessary to harness the power of data, algorithms, and computational techniques to solve real-world challenges.

At ACity, we pride ourselves on our cutting-edge curriculum, which blends theoretical foundations with practical applications. Our dedicated faculty, comprised of experts in various domains, are committed to fostering an engaging and collaborative learning environment. They are passionate educators and active researchers who bring their insights and experiences into the classroom.

As you navigate this catalogue, I encourage you to explore the diverse courses and specialisations available in our undergraduate, graduate, and certification/unique programs. Engage in research projects, internships, and workshops that will deepen your understanding and enhance your skills. Take advantage of the vibrant community of peers and mentors who will support you throughout your academic journey.

Together, we are shaping the future of technology and its impact on society. I am excited about what lies ahead for each of you, and I look forward to witnessing your growth and achievements.

I am wishing you a rewarding and inspiring academic year!

Sincerely,

Dr Navel Sharma

Acting Dean, Faculty of Computational Science and Informatics

3.3.2. Structure of the Faculty

The Faculty of Computational Science and Informatics at Academic City is dedicated to advancing technology and information systems knowledge and skills. The faculty is organised into two primary departments: a specialised maths unit that supports the entire university and a Cyber Security Directorate that supports the MSc in Cyber Security (with Data Forensics) program and also provides professional development courses and EC Council exams for the general populace.

Department of Computational Sciences

This department focuses on innovative technologies and their applications. It offers undergraduate majors in Artificial Intelligence (AI) and Computer Science, equipping students with a robust programming, algorithms, and software design and development foundation. In addition, the department provides master's degrees in Data Science and Analytics and Cybersecurity (with Data Forensics), addressing the increasing demand for expertise in data management and information security.

Department of Informatics

The Informatics department specialises in Information Technology (IT) and covers a wide range of topics, such as systems analysis, network management, storage management, Internet of Things, and database administration. Students have hands-on experience through projects and internships, enhancing their employability skills in the IT sector. The curriculum emphasises the integration of technology with effective communication and business strategies.

Math Resource Centre

The **Math Resource Centre** (MRC) is a valuable support hub in ACity, for enhancing student success in mathematics, promoting confidence, and ensuring that every learner has the support they need to excel. Its importance is highlighted in several key areas:

1. Personalised assistance through tutoring and mentorship: Students receive one-on-one help from trained tutors or faculty members, improving their understanding of mathematical concepts, problem-solving skills, and overall confidence.
2. Supplemental learning and preparation for exams: The MRC organises review sessions or workshops to help students prepare for upcoming tests and exams, giving them strategies and extra practice opportunities.
3. Collaboration and community building: By creating a community of learners, the MRC encourages students to ask questions and share ideas without fear of judgement which builds their confidence.
4. Closing Achievement Gaps: It helps students who may struggle with mathematics catch up, thereby preventing them from falling behind and promoting academic success.
5. Motivating Curiosity: It fosters a deeper interest in mathematics and related fields, helping students appreciate its relevance in real-world applications.

3.3.3. Programs Offered in the Faculty

3.3.3.1. Department of Computational Science

A. BSC Computer Science

Course Diet for levels 300 and 400

Computer Science (CS) Programme									
TOTAL PROGRAMME CREDITS						152			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	CS1130	Data Analysis (using MS Excel)	C	2	0	3	3	
	3	UC1102	French Language	M	2	2	0	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	6	GE1107	Physical Sciences	C	2	0	3	3	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	GE1108	Technology and Society	C	1	2	0	2	
			Total		15	4	15	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	2	CS1230	Emerging Technologies	C	2	0	3	3	
	3	CS1234	Financial Accounting I	C	2	0	3	3	
	4	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	5	CS1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3	

Computer Science (CS) Programme								
	6	UC1202	Logic and Critical Thinking	M	1	2	0	2
	7	GE1206	Programming in C	C	2	0	3	3
	8	UC1203	Text and Meaning	M	1	2	0	2
			Total		14	4	15	19
Year 2 / Level 200	SEMESTER 1							
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	2	CS2136	Data Structures and Algorithms	C	2	0	3	3
	3	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	4	CS2141	Fundamentals of Logic Design	C	2	0	3	3
	5	CS2137	Introduction to Operations Research	C	2	2	0	3
	6	UC2102	Leadership Seminar I	M	2	0	0	0
	7	CS2138	Object Oriented Programming with C++	C	2	0	3	3
			Total		14	2	12	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	3	CS2235	Computer Architecture and Organisation	C	2	0	3	3
	4	CS2236	Design and Analysis of Algorithms	C	2	2	0	3
	5	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	6	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	7	CS2238	Programming with Java	C	2	0	3	3
			Total		13	4	12	19
	SEMESTER 1							

Computer Science (CS) Programme								
Year 3 / Level 300	1	CS3135	Computer Networks	C	2	0	3	3
	2	CS3136	Database Systems	C	2	0	3	3
	3	MT3105	Discrete Mathematics (with MATLAB)	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	MT3107	Numerical Methods (with MATLAB)	C	2	2	0	3
	6	CS3137	Object Oriented System Design	C	2	2	0	3
	7	CS3138	Operating Systems	C	2	0	3	3
	8	CS3139	Web Technologies	C	2	0	3	3
			Total		16	4	15	21
	SEMESTER 2							
	1	CS3231	Computer Graphics and Multimedia	C	2	0	3	3
	2	CS3236	Distributed Computing	C	2	0	3	3
	3	CS3291	Industry Internship	SPL	0	0	0	2
	4	CS3237	Principles of Compiler Design	C	2	0	3	3
	5	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	6	CS3238	Research Methods in Computing	C	2	2	0	3
	7	CS3239	Software Engineering	C	2	0	3	3
			Total		12	2	15	20
Year 4 / Level 400	SEMESTER 1							
	1	CS4136	Computer Security	C	2	0	3	3
	2	CS4137	Computer Systems Programming	C	2	0	3	3
	3	CS4134	Human-Computer Interaction	C	2	0	3	3
	4	CS4192	Project Phase I	SPL	0	0	6	3
	5	CS41XX	Technical Elective – I	E	X	X	X	3

Computer Science (CS) Programme								
	6	CS41XX	Technical Elective – II	E	X	X	X	3
			Total		6	0	15	18
	SEMESTER 2							
	1	CS4241	Introduction to Artificial Intelligence	C	2	0	3	3
	2	CS4238	Mobile Computing	C	2	0	3	3
	3	GE4206	Professional Ethics and Values	C	2	2	0	3
	4	CS4293	Project Phase II	SPL	0	0	6	3
	5	CS42XX	Technical Elective – III	E	X	X	X	3
	6	CS42XX	Technical Elective – IV	E	X	X	X	3
			Total		6	2	12	18
			Grand Total		96	22	111	152

Specialisations

Data Processing and Networks							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4140	Cryptography and Network Security	E	2	0	3	3
2	CS4138	Neural Networks	E	2	0	3	3
3	CS4237	Data Mining and Warehousing	E	2	0	3	3
4	CS4239	TCP/IP Design and Implementation	E	2	0	3	3

Modern Computing and Programming							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4138	E-commerce	E	2	2	0	3
2	CS4139	Programming in ASP.NET	E	2	0	3	3
3	CS4235	Advanced Java Programming	E	2	0	3	3
4	CS4236	Cloud Computing	E	2	0	3	3

Advanced and Emerging Technologies							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4144	Embedded Systems	E	2	0	3	3
2	CS4129	Introduction to Robotics	E	2	2	0	3
3	CS4231	Internet of Things (IoT)	E	2	0	3	3
4	CS4232	Machine Learning	E	2	0	3	3

Computational Sciences and Data Analytics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4130	Business Intelligence	E	2	2	0	3
2	CS4131	Cloud Application	E	2	0	3	3
3	CS4234	Introduction to Data Science	E	2	0	3	3
4	CS4232	Machine Learning	E	2	0	3	3

Course Diet for levels 100 and 200

Computer Science (CS) Programme								
TOTAL PROGRAMME CREDITS						152		
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C
Year 1 / Level 100	SEMESTER 1							
	1	UC1101	Communication Skills	M	2	0	3	3
	2	CS1130	Data Analysis (using MS Excel)	C	2	0	3	3
	3	UC1102	French Language	M	2	0	3	3
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0
	5	UC1104	Introduction to Programming with Python	C	2	0	3	3
	6	GE1107	Physical Sciences	C	2	0	3	3
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
	8	UC1105	Technology and Society	C	2	0	0	2

Computer Science (CS) Programme									
			Total		16	0	18	20	
	SEMESTER 2								
	1	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	2	CS1230	Emerging Technologies	C	2	0	3	3	
	3	CS1234	Financial Accounting I	C	2	0	3	3	
	4	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	5	CS1246	Introduction to Electrical and Electronics Engineering	C	2	0	3	3	
	6	UC1202	Logic and Critical Thinking	M	2	0	0	2	
	7	GE1206	Programming in C	C	2	0	3	3	
	8	UC1203	Text and Meaning	M	2	0	0	2	
			Total		16	0	15	19	
Year 2 / Level 200	SEMESTER 1								
	1	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3	
	2	CS2135	Database Systems	C	2	0	3	3	
	3	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2	
	4	CS2141	Fundamentals of Logic Design	C	2	0	3	3	
	5	CS2137	Introduction to Operations Research	C	2	1	0	3	
	6	UC2102	Leadership Seminar I	M	2	0	0	0	
	7	CS2138	Object Oriented Programming with C++	C	2	0	3	3	
			Total		14	1	12	17	
	SEMESTER 2								
	1	UC2201	African Studies	M	1	2	0	2	

Computer Science (CS) Programme								
	2	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	3	CS2235	Computer Architecture and Organisation	C	2	0	3	3
	4	CS2236	Data Structures and Algorithms	C	2	2	0	3
	5	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	6	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	7	CS2238	Programming with Java	C	2	0	3	3
			Total		13	4	12	19
Year 3 / Level 300	SEMESTER 1							
	1	CS3135	Data Communication and Networking	C	2	0	3	3
	2	CS3136	Introduction to Data Science	C	2	0	3	3
	3	MT3105	Discrete Mathematics (with MATLAB)	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	MT3107	Numerical Methods (with MATLAB)	C	2	0	3	3
	6	CS3137	Object Oriented System Design	C	2	0	3	3
	7	CS3138	Operating Systems	C	2	0	3	3
	8	CS3139	Web Technologies	C	2	0	3	3
			Total		16	0	21	21
	SEMESTER 2							
	1	CS3231	Computer Graphics and Multimedia	C	2	0	3	3
	2	CS3236	Design and Analysis of Algorithms	C	2	0	3	3
	3	CS3291	Industry Internship	SPL	0	0	0	2
	4	CS3237	Principles of Compiler Design	C	2	0	3	3
	5	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3

Computer Science (CS) Programme								
	6	CS3238	Research Methods in Computing	C	2	1	0	3
	7	CS3239	Software Engineering	C	2	0	3	3
			Total		12	1	15	20
Year 4 / Level 400	SEMESTER 1							
	1	CS4135	Computer Security	C	2	0	3	3
	2	CS4132	Mobile Application Development	C	2	0	3	3
	3	CS4134	Human-Computer Interaction	C	2	0	3	3
	4	CS4192	Project Phase I	SPL	0	0	6	3
	5	CS41XX	Technical Elective – I	E	X	X	X	3
	6	CS41XX	Technical Elective – II	E	X	X	X	3
			Total		6	0	15	18
	SEMESTER 2							
	1	CS4241	Introduction to Artificial Intelligence	C	2	0	3	3
	2	CS4238	Distributed Computing	C	2	0	3	3
	3	GE4206	Professional Ethics and Values	C	2	2	0	3
	4	CS4293	Project Phase II	SPL	0	0	6	3
	5	CS42XX	Technical Elective – III	E	X	X	X	3
	6	CS42XX	Technical Elective – IV	E	X	X	X	3
			Total		6	2	12	18
			Grand Total		99	8	120	152

Specialisations

Data Processing and Networks							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4140	Cryptography and Network Security	E	2	0	3	3

2	CS4138	Neural Networks	E	2	0	3	3
3	CS4237	Data Mining and Warehousing	E	2	0	3	3
4	CS4239	TCP/IP Design and Implementation	E	2	0	3	3

Modern Computing and Programming							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4137	E-Business	E	2	2	0	3
2	CS4139	Programming in ASP.NET	E	2	0	3	3
3	CS4235	Advanced Java Programming	E	2	0	3	3
4	CS4236	Cloud Computing	E	2	0	3	3

Advanced and Emerging Technologies							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4144	Embedded Systems	E	2	0	3	3
2	CS4129	Introduction to Robotics	E	2	2	0	3
3	CS4231	Internet of Things (IoT)	E	2	0	3	3
4	CS4232	Machine Learning	E	2	0	3	3

Computational Sciences and Data Analytics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	CS4130	Business Intelligence	E	2	2	0	3
2	CS4131	Cloud Application	E	2	0	3	3
3	CS4231	Internet of Things (IoT)	E	2	0	3	3
4	CS4232	Machine Learning	E	2	0	3	3

B. BSC Artificial Intelligence

Course Diet for levels 300 and 400

Artificial Intelligence (AI) Programme									
TOTAL PROGRAMME CREDITS						146			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	UC1102	French Language	M	2	2	0	3	
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	4	GE1106	Introduction to Programming with Python	C	2	0	3	3	
	5	GE1107	Physical Sciences	C	2	0	3	3	
	6	GE1108	Technology and Society	C	1	2	0	2	
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	8	AI1130	Data Analysis using MS Excel	C	2	0	3	3	
			Total		15	4	15	20	
	SEMESTER 2								
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0	
	2	UC1202	Logic and Critical Thinking	M	1	2	0	2	
	3	UC1203	Text and Meaning	M	1	2	0	2	
	4	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3	
	5	GB1217	Principles of Microeconomics	C	1	2	0	3	
	6	GE1206	Programming in C	C	2	0	3	3	
	7	AI1234	Financial Accounting I	C	2	0	3	3	
	8	AI1225	Introduction to Artificial Intelligence and Robotics	C	2	0	3	3	

Artificial Intelligence (AI) Programme								
			Total		13	6	12	19
Year 2 / Level 200	SEMESTER 1							
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	2	UC2102	Leadership Seminar I	M	2	0	0	0
	3	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	4	AI2141	Fundamentals of Logic Design	C	2	0	3	3
	5	AI2125	AI: Representation and Problem-Solving	C	2	0	3	3
	6	AI2136	Data Structures and Algorithms	C	2	0	3	3
	7	AI2139	Introduction to Computer Systems	C	2	0	3	3
	8	AI2138	Object Oriented Programming with C++	C	2	0	3	3
			Total		16	0	18	20
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	3	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	4	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	5	AI2235	Computer Architecture and Organisation	C	2	0	3	3
	6	AI2236	Design and Analysis of Algorithms	C	2	2	0	3
	7	AI2247	Signals and Systems	C	2	0	3	3
			Total		13	4	12	19
Year 3 / Level 300	SEMESTER 1							
	1	UC3101	Leadership Seminar II	M	2	0	0	0
	2	MT3109	Applied Probability and Computing (with MATLAB)	C	2	0	3	3
	3	MT3105	Discrete Mathematics (with MATLAB)	C	2	0	3	3

Artificial Intelligence (AI) Programme								
	4	AI3156	Digital Signal Processing	C	1	0	3	3
	5	AI3125	Great Theoretical Ideas in Computer Science	C	2	0	3	3
	6	AI3128	Machine Learning	C	2	0	3	3
	7	AI3137	Object Oriented System Design	C	2	2	0	3
			Total		13	2	15	18
	SEMESTER 2							
	1	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	2	AI3225	Computational Neural Networks	C	2	0	3	3
	3	AI3226	Computer Vision	C	2	0	3	3
	4	AI3291	Industry Internship	SPL	0	0	0	2
	5	AI3227	Natural Language Processing	C	2	0	3	3
	6	AI3238	Research Methods in Computing	C	2	2	0	3
			Total		8	2	9	17
Year 4 / Level 400	SEMESTER 1							
	1	AI4125	Autonomous Agents	C	2	0	3	3
	2	AI4126	Computational Perception	C	2	0	3	3
	3	AI4127	Intermediate Data Analytics	C	2	0	3	3
	4	AI4128	Introduction to Deep Learning	C	2	0	3	3
	5	AI4192	Project Phase I	SPL	0	0	6	3
	6	AI4129	Speech Processing	C	2	0	3	3
			Total		10	0	21	18
	SEMESTER 2							
	1	GE4206	Professional Ethics and Values	C	2	2	0	3
	2	AI4225	Advanced Data Analytics	C	2	0	3	3

Artificial Intelligence (AI) Programme								
	3	AI4226	Intermediate Deep Learning	C	2	0	3	3
	4	AI4227	Design of Artificial Intelligence Products	C	2	0	3	3
	5	AI4293	Project Phase II	SPL	0	0	6	3
			Total		8	2	15	15
			Grand Total		96	20	117	146

Course Diet for levels 100 and 200

Artificial Intelligence (AI) Programme								
TOTAL PROGRAMME CREDITS					160			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C
Year 1 / Level 100	SEMESTER 1							
	1	UC1101	Communication Skills	M	2	0	3	3
	2	UC1102	French Language	M	2	0	3	3
	3	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0
	4	UC1104	Introduction to Programming with Python	C	2	0	3	3
	5	GE1107	Physical Sciences	C	2	0	3	3
	6	UC1105	Technology and Society	C	1	2	0	2
	7	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
	8	AI1225	Introduction to Artificial Intelligence and Robotics	C	2	0	3	3
	9	AI1130	Data Analysis using MS Excel	C	2	0	3	3
			Total		17	2	21	23
	SEMESTER 2							
	1	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0

Artificial Intelligence (AI) Programme								
	2	UC1202	Logic and Critical Thinking	M	1	2	0	2
	3	UC1203	Text and Meaning	M	1	2	0	2
	4	MT1202	Analytic Geometry and Calculus I (with MATLAB)	C	2	0	3	3
	5	GB1217	Principles of Microeconomics	C	1	2	0	3
	6	GE1206	Programming in C	C	2	0	3	3
	7	AI1234	Financial Accounting I	C	2	0	3	3
			Total		11	6	9	16
Year 2 / Level 200	SEMESTER 1							
	1	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	2	UC2102	Leadership Seminar I	M	2	0	0	0
	3	MT2103	Analytic Geometry and Calculus II (with MATLAB)	C	2	0	3	3
	4	AI2141	Fundamentals of Logic Design	C	2	0	3	3
	5	AI2125	AI: Representation and Problem-Solving	C	2	0	3	3
	6	AI2136	Data Structures and Algorithms	C	2	0	3	3
	7	AI2139	Introduction to Computer Systems	C	2	0	3	3
	8	AI2138	Object Oriented Programming with C++	C	2	0	3	3
			Total		16	0	18	20
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	3	MT2202	Applied Linear Algebra (with MATLAB)	C	2	0	3	3
	4	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	5	AI2235	Computer Architecture and Organisation	C	2	0	3	3

Artificial Intelligence (AI) Programme								
	6	AI2236	Design and Analysis of Algorithms	C	2	0	3	3
	7	AI2247	Signals and Systems	C	2	0	3	3
	8	AI2248	AI and Internet of Things	C	2	0	1	2
			Total		15	2	16	21
Year 3 / Level 300	SEMESTER 1							
	1	UC3101	Leadership Seminar II	M	2	0	0	0
	2	MT3109	Applied Probability and Computing (with MATLAB)	C	2	0	3	3
	3	MT3105	Discrete Mathematics (with MATLAB)	C	2	0	3	3
	4	AI3156	Digital Signal Processing	C	1	0	3	3
	5	AI3135	Computer Networks	C	2	2	0	3
	6	AI3128	Machine Learning and Data Mining	C	2	0	3	3
	7	AI3137	Object Oriented System Design	C	2	2	0	3
			Total		13	4	12	18
	SEMESTER 2							
	1	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	2	AI3239	Software Development	C	2	0	3	3
	3	AI3226	Computer Vision	C	2	0	3	3
	4	AI3291	Industry Internship	SPL	0	0	0	2
	5	AI3227	Natural Language Processing	C	2	0	3	3
	6	AI3238	Research Methods in Computing	C	2	2	0	3
	7	AI3228	Great Theoretical Ideas in Computer Science	C	2	0	3	3
			Total		10	2	12	20
Year 4 / Level 400	SEMESTER 1							
	1	AI4125	Computational Neural Networks	C	2	0	3	3

Artificial Intelligence (AI) Programme								
	2	AI4126	Computational Perception	C	2	0	3	3
	3	AI4127	Advanced Data Analytics	C	2	0	3	3
	4	AI4128	Deep Learning	C	2	0	3	3
	5	AI4192	Project Phase I	SPL	0	0	6	3
	6	AI4129	Speech Processing	C	2	0	3	3
	7	AI4136	Computer Security	C	2	0	3	3
			Total		12	0	24	21
	SEMESTER 2							
	1	GE4206	Professional Ethics and Values	C	2	2	0	3
	2	AI4225	Advanced Data Analytics	C	2	0	3	3
	3	AI4226	Intermediate Deep Learning	C	2	0	3	3
	4	AI4227	Design of Artificial Intelligence Products	C	2	0	3	3
	5	AI4228	Autonomous Agents	C	2	0	3	3
	6	AI4229	AI Ethics	C	2	0	3	3
	7	AI4293	Project Phase II	SPL	0	0	6	3
			Total		12	2	21	21
			Grand Total		106	18	133	160

3.3.3.2. Department of Information Technology

A. BSC Information Technology

Course Diet for levels 300 and 400

Information Technology (IT) Programme								
TOTAL PROGRAMME CREDITS				143				
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C
Year 1 / Level 100	SEMESTER 1							
	1	UC1101	Communication Skills	M	2	0	3	3
	2	IT1130	Data Analysis (using MS Excel)	C	2	0	3	3
	3	UC1102	French Language	M	2	0	3	3
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0
	5	GE1106	Introduction to Programming with Python	C	2	0	3	3
	6	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3
	7	GE1108	Technology and Society	C	1	2	0	2
			Total		13	2	15	17
	SEMESTER 2							
	1	IT1230	Emerging Technologies	C	2	1	0	3
	2	IT1234	Financial Accounting I	C	2	0	3	3
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	4	IT1231	IT Infrastructure Management	C	2	1	0	3
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2
	6	MT1204	Mathematics for Computing (with MATLAB)	C	2	0	3	3
	7	GE1206	Programming in C	C	2	0	3	3

Information Technology (IT) Programme								
	8	UC1203	Text and Meaning	M	1	2	0	2
			Total		14	6	9	19
Year 2 / Level 200	SEMESTER 1							
	1	IT2130	Computer Digital Systems	C	2	0	3	3
	2	IT2136	Data Structures and Algorithms	C	2	0	3	3
	3	IT2131	Database Systems	C	2	0	3	3
	4	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	5	IT2173	Global Environment of Business Decisions	C	2	3	0	3
	6	UC2102	Leadership Seminar I	M	2	0	0	0
	7	IT2138	Object Oriented Programming with C++	C	2	0	3	3
			Total		12	3	9	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	3	IT2230	Linux Administration	C	2	0	3	3
	4	IT2231	Operating Systems	C	2	0	3	3
	5	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3
	6	IT2238	Programming with Java	C	2	0	3	3
	7	IT2232	Systems Analysis and Design	C	2	0	3	3
			Total		13	2	15	19
Year 3 / Level 300	SEMESTER 1							
	1	IT3135	Computer Networks	C	2	0	3	3
	2	IT3141	Cryptography and Network Security	C	2	0	3	3

Information Technology (IT) Programme								
	3	IT3130	Introduction to Data Science	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	IT3131	Software Engineering	C	2	0	3	3
	6	IT3132	Storage Management	C	2	0	3	3
	7	IT3139	Web Technologies	C	2	0	3	3
			Total		14	0	18	18
	SEMESTER 2							
	1	IT3230	Cloud Computing	C	2	0	3	3
	2	IT3231	Computer Graphics and Multimedia	C	2	0	3	3
	3	IT3232	Cybersecurity	C	2	0	3	3
	4	IT3291	Industrial Internship	SPL	0	0	0	2
	5	IT3233	Multimedia Systems	C	2	0	3	3
	6	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	7	IT3238	Research Methods in Computing	C	2	2	0	3
			Total		12	2	15	20
Year 4 / Level 400	SEMESTER 1							
	1	IT4138	E-Commerce	C	2	0	3	3
	2	IT4130	Ethical and Legal Issues in Computing	C	2	2	0	3
	3	IT4140	Human-Computer Interaction	C	2	0	3	3
	4	IT4192	Project Phase I	SPL	0	0	6	3
	5	IT41XX	Technical Elective I	E	X	X	X	3
	6	IT41XX	Technical Elective II	E	X	X	X	3
			Total		6	2	12	18
	SEMESTER 2							

Information Technology (IT) Programme								
	1	IT4238	Mobile Computing	C	2	0	3	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3
	3	IT4293	Project Phase II	SPL	0	0	6	3
	4	IT42XX	Technical Elective III	E	X	X	X	3
	5	IT42XX	Technical Elective IV	E	X	X	X	3
			Total		4	2	9	15
			Grand Total		88	19	102	143

Specialisations

Data Science and Cloud Application							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4130	Business Intelligence	E	2	0	3	3
2	IT4131	Cloud Application	E	2	0	3	3
3	IT4230	Artificial Intelligence	E	2	0	3	3
4	IT4232	Machine Learning	E	2	0	3	3

Network Security, IoT and Application Development							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4132	Mobile Application Development	E	2	0	3	3
2	IT4133	Security Intelligence	E	2	0	3	3
3	IT4231	Internet of Things (IoT)	E	2	0	3	3
4	IT4233	Wireless Networks	E	2	0	3	3

Cybersecurity and Data Science							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4130	Business Intelligence	E	2	0	3	3
2	IT4133	Security Intelligence	E	2	0	3	3
3	IT4230	Artificial Intelligence	E	2	0	3	3

4	IT4232	Machine Learning	E	2	0	3	3
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Cloud Computing, IoT and Application Development							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4131	Cloud Application	E	3	0	2	3
2	IT4132	Mobile Application Development	E	3	0	2	3
3	IT4231	Internet of Things (IoT)	E	3	0	2	3
4	IT4233	Wireless Networks	E	3	0	2	3

Course Diet for levels 100 and 200

Information Technology (IT) Programme									
TOTAL PROGRAMME CREDITS						145			
Year/Level	S/N	Course Code	Course Name	Cat	L	T	P	C	
Year 1 / Level 100	SEMESTER 1								
	1	UC1101	Communication Skills	M	2	0	3	3	
	2	IT1130	Data Analysis (using MS Excel)	C	2	0	3	3	
	3	UC1102	French Language	M	2	2	0	3	
	4	UC1103	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar I	M	2	0	0	0	
	5	UC1104	Introduction to Programming with Python	M	2	0	3	3	
	6	MT1105	Pre-Calculus (with MATLAB)	C	2	0	3	3	
	7	UC1105	Technology and Society	M	1	2	0	2	
	8	IT1131	IT Infrastructure Management	C	2	0	3	3	
			Total		15	4	15	20	
	SEMESTER 2								
	1	IT1230	Emerging Technologies	C	1	2	0	2	
	2	IT1234	Financial Accounting I	C	2	2	0	3	

Information Technology (IT) Programme								
	3	UC1201	Fundamentals of Innovation and Entrepreneurship (FIE) Seminar II	M	2	0	0	0
	4	IT1232	Database Concepts and Technologies	C	2	0	3	3
	5	UC1202	Logic and Critical Thinking	M	1	2	0	2
	6	MT1204	Mathematics for Computing (with MATLAB)	C	2	0	3	3
	7	GE1206	Programming in C	C	2	0	3	3
	8	UC1203	Text and Meaning	M	1	2	0	2
			Total		13	8	9	18
Year 2 / Level 200	SEMESTER 1							
	1	IT2130	Computer Digital Systems	C	2	0	3	3
	2	IT2136	Data Structures and Algorithms	C	2	0	3	3
	3	IT2131	Database Systems	C	2	0	3	3
	4	UC2101	Fundamentals of Innovation and Entrepreneurship (FIE) I	M	2	0	0	2
	5	IT2173	Global Environment of Business Decisions	C	2	2	0	3
	6	UC2102	Leadership Seminar I	M	2	0	0	0
	7	IT2138	Object Oriented Programming with C++	C	2	0	3	3
			Total		14	2	12	17
	SEMESTER 2							
	1	UC2201	African Studies	M	1	2	0	2
	2	UC2202	Fundamentals of Innovation and Entrepreneurship (FIE) II	M	2	0	0	2
	3	IT2235	Computer Architecture and organisation	C	2	0	3	3
	4	IT2239	Web Technologies and Development	C	2	0	3	3
	5	MT2204	Probability, Statistics and Reliability (with MATLAB)	C	2	0	3	3

Information Technology (IT) Programme								
	6	IT2238	Programming with Java	C	2	0	3	3
	7	IT2232	Systems Analysis and Design	C	2	0	3	3
			Total		13	2	15	19
Year 3 / Level 300	SEMESTER 1							
	1	IT3138	Operating Systems	C	2	0	3	3
	2	IT3140	Ethical and Legal Issues in Information Technology	C	2	2	0	3
	3	IT3130	Introduction to Data Science	C	2	0	3	3
	4	UC3101	Leadership Seminar II	M	2	0	0	0
	5	IT3133	Linux Administration	C	2	0	3	3
	6	IT3134	Data Communication and Networking	C	2	0	3	3
	7	IT3129	Mobile App Development	C	2	0	3	3
			Total		14	2	15	18
	SEMESTER 2							
	1	IT3242	Cryptography and Network Security	C	2	0	3	3
	2	IT3231	Computer Graphics and Multimedia	C	2	0	3	3
	3	IT3239	Software Engineering	C	2	0	3	3
	4	IT3291	Industrial Internship	C	0	4	0	2
	5	IT3241	Introduction to Artificial Intelligence	C	2	0	3	3
	6	GE3205	Project Management, Engineering Economics and Risk Analysis	C	2	0	3	3
	7	IT3238	Research Methods in Computing	C	2	2	0	3
			Total		12	6	15	20
Year 4 / Level 400	SEMESTER 1							
	1	IT4113	E-Business	C	2	0	3	3
	2	IT4135	Computer Security	C	2	0	3	3

Information Technology (IT) Programme								
	3	IT4140	Human-Computer Interaction	C	2	0	3	3
	4	IT4192	Project Phase I	SPL	0	2	6	3
	5	IT41XX	Technical Elective I	E	2	0	3	3
	6	IT41XX	Technical Elective II	E	2	0	3	3
			Total		10	2	21	18
	SEMESTER 2							
	1	IT4240	System Administration and Maintenance	C	2	0	3	3
	2	GE4206	Professional Ethics and Values	C	2	2	0	3
	3	IT4293	Project Phase II	SPL	0	2	6	3
	4	IT42XX	Technical Elective III	SPL	2	0	3	3
	5	IT42XX	Technical Elective IV	SPL	2	0	3	3
			Total		8	4	15	15
			Grand Total		99	30	117	145

Specialisations

Data Science and Analytics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4130	Business Intelligence	E	2	0	3	3
2	IT41xx	Big Data And Analytics	E	2	0	3	3
3	IT4237	Data Mining and Warehousing	E	2	0	3	3
4	IT4232	Machine Learning	E	2	0	3	3

Cybersecurity, IoT and Forensics							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT41xx	Computer Forensics and Cybersecurity	E	2	0	3	3
2	IT4133	Security Intelligence	E	2	0	3	3

3	IT4231	Internet of Things (IoT)	E	2	0	3	3
4	IT4233	Wireless Networks	E	2	0	3	3

Cloud Application, IoT and Intelligence							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4130	Cloud Application	E	2	0	3	3
2	IT4133	Security Intelligence	E	2	0	3	3
3	IT4230	Internet of Things (IoT)	E	2	0	3	3
4	IT4232	Wireless Networks	E	2	0	3	3

Cloud Computing, Intelligence							
S/N	Course Code	Elective Course Name	Cat	L	T	P	C
1	IT4131	Cloud Application	E	3	0	2	3
2	IT4130	Business Intelligence	E	3	0	2	3
3	IT4232	Machine Learning	E	3	0	2	3
4	IT4233	Wireless Networks	E	3	0	2	3

3.3.4. Graduate Programs

3.3.4.1. Department of Computational Science

A. MSc Data Science and Analytics

Course Diet

MSc. Data Science & Analytics								
TOTAL PROGRAMME CREDITS						33		
Year / Level	S/ N	Course Code	Course Status	Course Name	L	T	P	C
Year 1/Level 500	SEMESTER 1							
	1	DS5101	Compulsory	Foundations of Data Science and Big Data Analytics	2	2	3	3
	2	DS5102	Compulsory	Big Data Management	2	2	3	3
	3	DS5103	Compulsory	Introduction to Data Science	2	2	3	3
	4	DS5104	Compulsory	Mathematical Foundations for Data Science	2	2	3	3
				Total	8	8	12	12
	SEMESTER 2							
	1	DS5201	Compulsory	Deep Learning and Neural Networks	2	2	3	3
	2	DS5203	Compulsory	Statistical Methods for Data Science	2	1	3	3
	3	DS5202	Compulsory	Special Topics in Data Science	2	1	3	3
				Total	6	5	9	9
Year 2 / Level 600	SEMESTER 1							
	1	DS6101	Compulsory	Graduate Qualifying Seminar	2	3	6	3
	2	DS6102	Elective I	Data Warehousing and Information Retrieval	2	2	3	3
	3	DS6103	Elective I	Financial Decision Making for Value Creation	2	2	3	3
	4	DS6104	Compulsory	MSc. Thesis Phase 1	2	3	6	3
				Total	6	7	12	12
	SEMESTER 2							

	1	DS6201	Compulsory	MSc. Thesis Phase II	2	3	6	3
Grand Total					22	23	39	36

B. MSC Cyber Security

Course Diet

MSc. Cyber Security								
TOTAL PROGRAMME CREDITS						36		
Year / Level	S/N	Course Code	Course Status	Course Name	L	T	P	C
Year 1 / Level 500	SEMESTER 1							
	1	CYB5101	Compulsory	Information Security Assurance & Management	2	2	3	3
	2	CYB5102	Compulsory	Network & Enterprise Systems Security Management	2	2	3	3
	3	CYB5103	Compulsory	Criminological Theories	2	2	3	3
	4	CYB5104	Compulsory	Cyberspace Ethics & Law	2	2	3	3
				Total	8	8	12	12
	SEMESTER 2							
	1	CYB5201	Compulsory	Cryptography & Digital Forensics	2	2	3	3
	2	CYB5202	Compulsory	BlockChain and Cryptocurrencies	2	1	3	3
	3	CYB5203	Compulsory	Cyber Psychology & Behaviour	2	1	3	3
				Total	6	5	9	9
Year 2 / Level 600	SEMESTER 1							
	1	CYB6101	Compulsory	Graduate Qualifying Seminar	2	3	6	3
	2	CYB6102	Elective I	Cyber Warfare & Terrorism	2	2	3	3
	3	CYB6103	Elective I	Cyber Security Breaches Case Studies	2	2	3	3
	4	CYB6104	Compulsory	MSc. Thesis Phase 1	2	3	6	3
				Total	6	7	12	12
	SEMESTER 2							
	1	CYB6201	Compulsory	MSc. Thesis Phase II	2	3	6	3
Grand Total					22	23	39	36

4.0. Contact Information

Should you have any academic queries, email the Academic Affairs team at academics@acity.edu.gh.

Should you have questions about graduate programs, email the Graduate Programs team at graduate@acity.edu.gh.

Should you have any queries regarding your academic records, please email the Registry at registry@acity.edu.gh.



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