

**SCHOOL OF MANAGEMENT TECHNOLOGY
CYBER SECURITY, UNDERGRADUATE COURSE OUTLINE**

YEAR ONE: HARMATTAN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	MTH 101	Elementary Mathematics I	3	1	0	4
2.	PHY 101	General Physics I	2	1	1	4
3.	CHM 101	General Chemistry I	2	1	1	4
4.	BIO 101	General Biology I	2	0	1	3
5.	ENG 101	Workshop Practice I	0	0	1	1
6.	ENG 103	Engineering Drawing I	0	0	1	1
7.	GST 101	Use of English I	1	1	0	2
8.	GST 103	Humanities	1	0	0	1
		Electives				
* 9.	IGB 101	Introduction to Igbo Grammar and Composition & Comprehension	1	0	0	1
	FRN 101	French Language I	1	0	0	1
TOTAL						21 Units

*Students are to register either IGB 101 or FRN 101.

YEAR ONE: RAIN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CHM 102	General Chemistry II	2	1	1	4
2.	MTH 102	Elementary Mathematics II	3	1	0	4
3.	PHY 102	General Physics II	2	1	1	4
4.	ENG 102	Workshop Practice II	0	0	1	1
5.	ENG 104	Engineering Drawing II	0	0	1	1
6.	GST 102	Use of English II	1	1	0	2
7.	GST 108	Social Science I	1	1	0	2
8.	GST 110	Science, Technology and Society	1	0	0	1
		Electives				
*9	IGB 102	Introduction to Igbo History, Culture and Literature II	1	0	0	1
	FRN 102	French Language II	1	0	0	1
TOTAL						20 Units

*Students are to register either IGB 102 or FRN 102.

YEAR TWO: HARMATTAN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 201	Fundamentals of Cybersecurity I	1	1	0	2
2.	CSC 201	Computer and Applications I	2	1	1	4
3.	MTH 201	Mathematical Methods I	2	1	0	3
4.	CYB 203	Introduction to Operating Systems	1	1	1	3
5.	CYB 205	System and Network Administration	2	0	1	3
6.	STA 211	Introduction to Statistics and Probability	2	1	0	3
7.	ENG 201	Workshop Practice III	0	0	0	1
8.	GST 201	Social Science II	1	0	0	1
TOTAL						20 Units

YEAR TWO: RAIN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 202	Fundamentals of Cybersecurity II	1	1	0	2
2.	CSC 202	Computer and Applications II	2	0	1	3
3.	CIT 202	Computer Programming I	2	0	1	3
4.	MTH 202	Mathematical Methods II	2	1	0	3
5.	CIT 204	Computer Architecture and Organisation I	1	0	1	2
6.	CYB 204	Digital Forensics I	2	0	1	3
7.	CYB 206	Introduction to Database Design and Applications	1	1	0	2
8.	IFT 206	Digital Logic Systems and Design	1	1	1	3
TOTAL						21 Units

YEAR TWO: SIWES PROGRAMME

S/N	Course Code	Course Title	Units
1.	SIW 200	SIWES	2
TOTAL			2 Units

YEAR THREE: HARMATTAN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CIT 301	Operating Systems I	2	0	1	3
2.	CIT 303	System Analysis and Design	2	1	0	3
3.	CIT 305	Introduction to Software Engineering	1	0	1	2
4.	CSC 305	Data Structures and Algorithm Analysis	2	0	0	2
5.	CSC 309	Discrete Structures	2	1	0	3
6.	IFT 303	Data Communication and Networking	2	0	1	3
7.	CYB 301	Information System Security Policy	1	0	0	1
8.	ENS 301	Entrepreneurship I	2	0	0	2
TOTAL						19 Units

YEAR THREE: RAIN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CIT 302	Computer Programming II	2	0	1	3
2.	CIT 304	Database Management Systems I	2	0	1	3
3.	CIT 306	Web Design and Programming I	2	0	1	3
4.	CSC 302	Computer Architecture and Organization II	2	0	0	2
5.	ENS 302	Business Creation Growth & Corporate Governance	2	0	0	2
6.	CYB 302	Digital Forensics II	1	0	1	2
7.	CYB 304	Enterprise and Perimeter Security	1	1	0	2
8.	CYB 306	Biometrics Security	1	1	0	2
9.	CYB 308	Cryptographic Techniques	2	0	0	2
TOTAL						21 Units

YEAR THREE: SIWES PROGRAMME

S/N	Course Code	Course Title	Units
1.	SIW 300	SIWES	2
TOTAL			2 Units

YEAR FOUR: HARMATTAN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 401	Software Defined Networks	1	1	0	2
2.	CYB 403	Information Systems Security Engineering	2	0	1	3
3.	CYB 405	Introduction to Ethical Hacking	1	0	1	2
4.	CYB 407	Forensic Analysis Tools and Techniques I	2	0	1	3
5.	CYB 409	Linux and Unix Operating Systems	2	0	1	3
6.	CSC 405	Algorithms and Complexity Analysis	2	1	0	3
7.	CSC 407	Computer and Society	2	0	0	2
8.	IFT 405	Research Methodology & Capstone Management	2	0	0	2
TOTAL						20 Units

Electives

S/N	Course Code	Course Title	L	T	P	Units
1.	CSC 417	Embedded Systems and Firmware Design	1	0	1	2
2.	IFT 409	Data Science	2	0	1	3
3.	CYB 411	Application Security	2	0	0	2

YEAR FOUR SIWES PROGRAMME

S/N	Course Code	Course Title	Units
1.	SIW 400/401	SIWES	6
TOTAL			6 Units

YEAR FIVE: HARMATTAN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 501	Database Management and Control Systems	2	0	0	2
2.	CYB 503	Systems Vulnerability Assessment and Testing	1	0	1	2
3.	CYB 505	Cloud Computing Security	2	0	0	2
4.	CYB 507	Information Disaster Recovery	1	1	0	2
5.	CYB 509	VoIP and Multimedia Security	2	0	0	2
6.	CYB 511	Forensic Analysis Tools and Techniques II	2	0	1	3
7.	IFT 507	Software Engineering and Practice	2	0	1	3
8.	CSC 513	Artificial Intelligence and Expert Systems	2	0	0	2
9.	CYB 599	Project				3
TOTAL						21 Units

Electives:

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 513	Security Strategies for Web Applications and Social Networks	2	0	0	2
2.	CYB 515	Enterprise Security and Information Assurance	2	0	0	2

YEAR FIVE: RAIN SEMESTER

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 502	Fault Tolerant Computing	2	0	0	2
2.	CYB 504	Cryptography and Applications	2	1	0	3
3.	CYB 506	Cybersecurity Policies, Laws and Frameworks	2	0	0	2
4.	CYB 508	Information Security Assurance and Risk Analysis	2	0	0	2
5.	CYB 510	Ethical Hacking and Reverse Engineering	1	0	1	2
6.	CYB 512	Threats, Exploits, and Countermeasures	1	1	0	2
7.	CYB 514	Special Topics on Cybersecurity	2	0	0	2
8.	CSC 510	Computer Modeling and Simulation	2	0	1	3
9.	CYB 599	Project				3
TOTAL						21 Units

Electives:

S/N	Course Code	Course Title	L	T	P	Units
1.	CYB 516	Information Security Models	2	0	0	2
2.	CYB 518	Privacy in a Networked World	2	0	0	2
TOTAL						2 Units