

Date: _____

Name _____
number _____

APS (min 30) _____
Language (Eng/Afr min level 4) _____
Mathematics (min level 5) _____

FUNDAMENTAL MODULES					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (at least 12 credits)					
	UPO112	Academic orientation			
	ALL121	Technology		6	S2
<i>If the proficiency test is passed, student registers for AIM101, otherwise AIM111 and AIM121</i>					
	AIM101	management		6	S1
OR					
	AIM111	management		4	S1
	AIM121	management		4	S2
Year-level 2 (8 credits)					
	JCP202	Community-based Project		8	Year

CORE MODULES					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (80 credits)					
	COS110	Program Design: Introduction	COS132, COS151 and Maths level 5	16	S2
	COS122	Operating Systems	COS132	16	S2
	COS132	Imperative Programming	Mathematics level 5	16	S1
	COS151	Introduction to Computer Science	Mathematics level 5	8	S1
	WTW115	Discrete Structures	Mathematics level 4	8	S1
	WTW134	Calculus	Natural Sciences Par 1.2 (Mathematics Level 4)	16	S1
Year-level 2 (116 credits)					
	COS210	Theoretical Computer Science	COS110 and COS151	8	S1
	COS212	Data Structures & Algorithms	COS110	16	S1
	COS214	Software modelling	COS212	16	S2
	COS216	Netcentric Comp Systems	COS110	16	S1
	COS221	Introduction to Database systems	COS110	16	S1
	COS226	Concurrent Systems	COS122 and COS212	16	S2
	COS284	Computer Organisation and Architecture	COS212 GS	16	S2
	WTW285	Discrete Structures	WTW115	12	S2
Year-level 3 (111 credits)					
	COS301	Software Engineering	COS212 and COS214	27	Year
	COS330	Computer security & ethics	COS110	18	S2
	COS332	Computer Networks	COS216	18	S1
	COS333	Programming Languages	COS110	18	S2
	IMY310	Multimedia – Human Computer Interaction	Requires departmental selection	30	S1

ELECTIVE MODULES (min 119 credits)	
Select one of the following elective groups	
Data Science	
Genetics	
Geographical Information Systems	
IT and Enterprises	
IT and Law	
IT and Music	
Software Development	

Data Science					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (50 credits)					
	WTW146	Linear algebra	Mathematics Level 4	8	S2
	WTW148	Calculus	WTW114GS or WTW134	8	S2
	WTW152	Mathematical modelling	Mathematics Level 5	8	S1
	STK110	Statistics	Mathematics Level 5	13	S1
	STC 122	Statistics	STK 110 -at least 60%	13	S2
Year-level 2 (20 credits)					
	STK210	Statistics	STK110, STK120 or WST111, WST121	20	S1
	STK220	Statistics	STK210GS	20	S2
	WST 212	Application in Data Science	WST 111, WST 121 or STK 110, STC 122	12	S1
Year-level 3 (61 credits)					
	COS314	Artificial Intelligence	COS110	18	S1
	COS326	Database systems	COS221	18	S2
	STK353	The science of data analytics	STK210, STK220 or WST211, WST221	25	S2

Genetics elective group					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (64 credits)					
	BME120	Biometry	Mathematics Level 4 or (STK113 and STK123)	16	S2
	BOT161	Plant Biology	MLB111GS	8	S2
	GTS161	Introduction to Genetics	MLB111GS	8	S2
	MBY161	Introduction to Microbiology		8	S2
	MLB111	Molecular and Cell Biology	Mathematics level 5	16	S1
	WTW146	Linear Algebra	Mathematics level 4	8	S2
Year-level 2 (48 credits)					
	GTS251	Molecular Genetics	GTS161GS	12	S1
	GTS261	Genetic Diversity and Evolution	GTS251GS	12	S2
	MBY251	Bacteriology	MBY161GS	12	S1
	MBY261	Mycology	MBY161GS	12	S2
Year-level 3 (54 credits)					
	COS314	Artificial Intelligence	COS110	18	S1
<i>Choice of either</i>					
	COS326	Database Systems	COS221	18	S2
	COS344	Computer Graphics	COS110 and WTW124 or WTW146	18	S1
OR					
	GTS354	Genome evolution and phylogenetics	GTS251GS, GTS261GS	18	S1
	GTS367	Population and evolutionary genetics	GTS251 and GTS 261GS	18	S2
OR					
	GTS354	Genome evolution and phylogenetics	GTS251GS, GTS261GS	18	S1
	BTC361	Plant genetics and crop biotechnology	GTS251, GTS261GS (or BOT261)	18	S2

Geographical Information Systems elective group					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (55 credits)					
	GGY156	Aspects of Human Geography		8	Q2
	ENV101	Introduction to Environmental Sciences		8	Q1
	GGY166	Southern African Geomorphology		8	Q3
	GMC110	Cartography		10	S2
	STK110	Statistics	Mathematics level 5	13	S1
	WTW146	Linear Algebra	Mathematics level 4	8	S2
Year-level 2 (42 credits)					
	GGY283	Introductory GIS	GMC110	14	S1
	GIS220	Geographical Data Analysis	GMC110 and (STK110 or BME120)	14	S2
	GMA220	Remote Sensing	GMC110	14	S1
Year-level 3 (80 credits)					
	COS326	Database Systems	COS221	18	S2
	COS344	Computer Graphics	COS110 and WTW124 or WTW146	18	S1
	GIS310	Geographic Information Systems	GGY283	22	S1
	GIS320	Spatial Analysis	GIS310 and GGY283	22	S2

IT and Enterprises elective group					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (43 credits)					
	BEM120	Marketing management		10	S2
	OBS114	Business Management		10	S1
	OBS124	Business Management	Admission to exam in OBS114	10	S2
	STK110	Statistics	Mathematics Level 5	13	S1
Year-level 2 (58 credits)					
	BEM212	Consumer behaviour	BEM120 GS	16	S1
	FIL251	philosophy	-	10	Q2 - 4
	OBS210	Business Management: Logistics Management	OBS114 or OBS124 with admission to exam in the other	16	S1
	OBS220	Business management: Project management	OBS114 or OBS124 with admission to examination in the other	16	S2
Year-level 3 (40 credits)					
<i>One of the following combinations to be taken</i>					
	OBS359	International Business Management	OBS114 or OBS124 with admission to exam in the other	20	S1
	OBS369	International Financial Management	Admission to exam in OBS359	20	S2
OR					
	OBS310	Human Resource Management	OBS114 or OBS124 with admission to exam in the other	20	S1
	OBS320	Business Management	OBS114 or OBS124 with admission to exam in the other	20	S2

IT and Law elective group					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (44 credits)					
	KRG110	Commercial Law	-	10	S1
	KRG120	Commercial Law	KRG110 exam entrance	10	S2
	KRM110	Criminology	-	12	S1
	KRM120	Criminology	KRM110	12	S2
Year-level 2 (64 credits)					
	KRG200	Commercial Law	KRG120	24	Year
	KRM210	Criminology	KRM110, KRM120	20	S1
	KRM220	Criminology	KRM110, KRM120, KRM210	20	S2
Year-level 3 (70 credits)					
	KRM310	Criminology	KRM210, KRM220	30	S1
	KRM320	Criminology	KRM210, KRM220, KRM310	30	S2
	KUB420	Cyber Law	The head of department may set the module prerequisites	10	S2

IT and Music elective group					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (48 credits)					
	MGS100	Musicology	Admission into relevant programme (Gr 3 theory, Gr 5 practical)	20	Year
	MCS200	Music technology	Admission into relevant programme (Gr 3 theory, Gr 5 practical)	12	Year
	WTW146	Linear algebra	Mathematics level 4	8	S2
	WTW148	Calculus	WTW114GS or WTW134	8	S2
Year-level 2 (18 credits)					
	MCS302	Music technology	Admission into relevant programme MCS 200	18	Year
Year-level 3 (58 credits)					
	CO3xx	Any other third year COS module		18	
	MCS402	Music technology	Admission into relevant programme	40	Year

Software Development elective group					
	Code	Module	Prerequisites	Credits	Period
Year-level 1 (40 credits)					
	INF154	Informatics	Mathematics level 4	10	S1
	INF164	Informatics	INF154; Mathematics level 4; AIM101 or AIM102 or AIM111 and AIM121	10	S2
	INF171	Informatics	Mathematics level 4	20	Year
Year-level 2 (46 credits)					
	INF272	Informatics	AIM101 or AIM111 and AIM121, INF163/1 and INF164	14	Year
	IMY210	Multimedia – Advanced Markup Language (1)	IMY110 or equivalent HTML knowledge	16	S1
	IMY220	Multimedia – Advanced Markup Language (2)	IMY210 and COS216	16	S2
Year-level 3 (33 credits)					
	COS326	Database Systems	COS221	18	S2
	INF354	Informatics	INF261, 225, 271, 272	15	S1