

Knowledge, Innovation, Excellence

# NRC CAMPUS

**FACULTY:** Agricultural and Natural Sciences

**DEPARTMENT:** Natural Resources

About the department

The Natural Resources Department was established at Natural Resources College in 2001 and has the mandate of teaching, conducting research, and providing outreach and consultancy services in Environmental Management, Irrigation, Land Administration and Agricultural Education. The department takes a leading role in the promotion of environment protection and natural resources conservation, agricultural production through the development, introduction and promotion of appropriate irrigation technologies and land administration and management practices for the sustainable production and national development. The department places a strong emphasis on research and firmly believes that a research-oriented atmosphere enhances the quality of the teaching and learning process. The department welcomes partnership with industry as one way of linking its teaching and research with industrial needs.

### **Mission**

The mission of Natural Resources Department is to advance, promote and disseminate the knowledge and application of environmental and natural resource management aspects, irrigation engineering techniques and land administration and management practices while conserving natural resources, preserving environmental quality, and ensuring the health and safety of people

The aims of the department include; teaching technical and management skills leading to Certificate in Basic Studies, Diploma in Agriculture Education, Diploma in Environmental Management, Diploma in Irrigation Technology and Diploma in Land Administration. The Natural Resources Department at NRC campus embraces four key thematic areas in Natural Sciences aimed at building capacity in areas of Agriculture Education, Basic Studies,

Environmental Management, Irrigation Technology and Land Administration. These programmes were developed with the aim of producing front-line staff in natural resources and agriculture sectors. Training in Natural Resources Department is geared at providing technical skills and understanding of natural resources and management issues. The department also offers basics courses across all the programmes at NCR Campus.

#### **Under Graduate Programs:**

#### 1. Certificate in Basic Studies

This program is a tailor made program aimed at allowing candidates who have a desire to have a certificate in advanced basic studies. It prepares candidates willing to upgrade their qualifications in various Universities across the region and beyond.

### Courses offered under the program

<b>Module Code</b>	Module Name	Wks	Theory	Practical	Total	Credit
			Hours	Hours	Hours	Hours
	Year 1, Semester One					
BS-BIO 111	Biology	3	60	30	90	5.0
BS-MAT 112	Mathematics I	2	45	15	60	3.5
BS-LCS 113	Language & Communication skills	1	15	15	30	1.5
BS-CAP 114	Computer Application	1	15	15	30	1.5
BS-CHE 115	Chemistry	3	60	30	90	5.0
BS-HIV 116	HIV/AIDS, Gender & Development	1	15	15	30	1.5
BS-PHY 117	Physics I	2	30	30	60	3.0
	<b>End of Semester Examinations</b>	2	-	_	-	-
	Semester 1 Totals	15	240	150	390	21

#### 2. Diploma in Agriculture Education

The program in agriculture education at diploma level was developed to complement the efforts of government so to increase the number of trained agriculture teachers for the secondary sub-sector thereby contributing towards reducing the shortage of the much needed agriculture teachers. The Program aims at preparing outstanding, reflective and life-long learning to agriculture educators at diploma level who will contribute to national development in Malawi. It clearly stipulates at equipping students with agriculture knowledge, skills and attitudes at diploma level who can competently teach secondary school agriculture curriculum for national development and food security. It provides agriculture teachers with appropriate subject matter for effective teaching and learning. It involves training agriculture teachers in appropriate methodologies of teaching and learning, instilling professional ethics and ultimately producing graduates with capabilities of conducting research and development in agriculture education sector.

Module Code	Module Name	Wks	Lecture Hours	Practical Hours	Total	Credit Hours
	YEAR 1 SEMESTER 1					
BIO111	Biology I	3	30	60	90	4.0

MAT112	Mathematics	2	30	30	60	3.0
LCS113	Language & Communication skills	1	15	15	30	1.5
EDU114	History of Education	1	30	0	30	2.0
CHE115	Chemistry I	3	30	60	90	4.0
ARD111	H.I.V and AIDS, Gender & Development	1	30	0	30	2.0
PHY117	Physics	2	30	30	60	3.0
	<b>End of Semester Exams</b>	2				
	SEMESTER 1 TOTALS	15	195	195	390	19.5
	Year 1 SEMESTER 2					
BIO121	Biology II	3	30	60	90	4.0
CHE 122	Chemistry II	3	30	60	90	4.0
AHP 123	Pig Production	2	30	30	60	3.0
EDU 125	Introduction to Education psychology	1	30	0	30	2.0
EDU126	Philosophy of Education	1	30	0	30	2.0
AGR 128	Field Crops	3	45	45	90	4.5
	End of Semester Exams	2				
	SEMESTER TOTALS	15	210	180	390	20.5
	SEMESTER TOTALS	10	210	100	370	20.5
	Year 2 SEMESTER 1					
AHT214	Horticultural Crops Production	2	30	30	60	3.0
ACP212	Conservation Agriculture	1	15	15	30	1.5
ARD121	Agriculture Economics	1	15	15	30	1.5
ENV213	Agriculture & Environment	2	30	30	60	3.0
EDU211	Sociology of Education	1	30	0	30	2.0
FNU215	Food & Human Nutrition	2	45	15	60	3.5
EDU212	Science education 1 (Agr, Bio and Che)	2	30	30	60	3.0
AGR217	Plantation crops production	2	30		60	3.0
	<b>End of Semester Exams</b>	2				
	SEMESTER TOTALS	15	225	165	390	20.5
	Year 2 SEMESTER 2					
ENV 221	Soil & water conservation	3	45	45	90	4.5
EDU 221	Instructional Media and Technology	1	30	0	30	2.0
AHP224	Sheep & Goat Production	1	15	15	30	1.5
AHP 223	Beef & Dairy Production	3	45	45	90	4.5
AGR 224	Entrepreneurship	3	30	60	90	4.0
EDU222	Science Education II (Biology or Chemistry education)	2	30	30	60	3.0
AHP 226	Poultry Production	2	30	30	60	3.0
	End of Semester Exams	2	<del> </del>			
	End of Semester Exams	4				

	Year 3 SEMESTER 1					
AGR311	Farm Business Management	3	45	45	90	4.5
EDU314	Introduction to Special Needs	1	30	0	30	2.0
	Education					
ACP 312	Experimental design & analysis	2	30	30	60	3.0
PIR315	Principles of Irrigation	3	45	45	90	4.5
HOT124	Mushroom Production	1	15	15	30	1.5
EDU313	Science Education III (AGR)	2	30	30	60	3.0
IRR127	Farm mechanization	1	15	15	30	1.5
	<b>End of Semester Exams</b>	2				
	SEMESTER TOTALS	15	215	175	390	20.5
	Year 3 SEMESTER 2					
EDU321	Testing, Measurement &	2	30	30	60	3.0
	Evaluation					

## 3. Diploma in Environmental Management

The policy change in the Malawi Government has not only called for changing attitudes in people but also change in the focus, attitudes, and skills of the extension service providers. For this reason, the department felt challenged to provide training that meets these demands and recent talks on environmental degradation in the country and indeed the policy changes in the country necessitated the need for training more frontline staff in the field of environmental management. The Program aims at preparing outstanding, reflective and life-long learning to technical experts in environmental management at diploma level who will contribute to national development in Malawi. It clearly stipulates at equipping students with natural resources and environment management knowledge, skills and attitudes at diploma level who can competently for national development and food security

Module Code	Module Name	Wks	Theory Hours	Practical Hours	Total Hours	Credit Hours
	Year 1, Semester One					
BS-BIO	Biology	3	30	60	90	4.0
BS- MAT	Mathematics	2	30	30	60	3.0
BS-LCS	Language & Communication skills	1	15	15	30	1.5
BS- COM	Computer Applications	1	15	15	30	1.5
BS- CHM	Chemistry	3	30	60	90	4.0
BS-HIV	HIV/AIDS, Gender & Development	1	15	15	30	1.5
BS-PHY	Physics	2	30	30	60	3.0
	End of Semester Examinations	2				
	Semester 1 Totals	15	240	150	390	18.5

	Year 1, Semester Two					
	Introduction to Environmental					
EV-IEP	Principles	2	45	15	60	3.5
RD-						
WRC	Working with Rural Communities	1	30	-	30	2.0
RD-	D T. 1	2	4.5	1.5	60	2.0
PRA	Participatory Tools and Techniques	2	45	15	60	3.0
FM- RME	Research Methods	2	45	15	60	3.5
NVIL	Community Based Natural Resources		43	13	00	3.3
Ev-EEE	Management Management	1	30	_	30	2.0
EV-	Management		30		50	2.0
SWC	Soil and Water Conservation	3	60	30	90	5.0
EV-		_				
WMG	Waste Management	2	45	15	60	3.5
	<b>End of Semester Examinations</b>	2				
	Semester Totals	15	300	90	390	23
	PRACTICAL MODULES					
EV-FP1	Farm Practical 1	2	_	60	60	2
AG-	1'arm Fractical 1		-	00	00	
SP1-						
SAS	Special Project 1 (Situation Analysis)	1	_	30	30	1
EV-AT						-
1	Field Attachment 1	1	-	30	30	1
	Semester Totals	18	300	180	480	26
	Year 2 Semester One				100	
STS-121	Statistics Statistics	1	15	15	30	1.5
515-121	Policy, Legal & Institutional	1	13	13	30	1.5
EV-PLF	Frameworks for NRM	2	45	15	60	3.5
FN-			-			
FMB	Food Microbiology and Technology	2	45	15	60	3.5
EV-						
EEV	Energy and the Environment	2	45	15	60	3.5
EV-	Water Quality Monitoring and					
WQM	Treatment	3	60	30	90	5
EV-	Wildlife Management And			•		_
WLM	Conservation	3	60	30	90	5
	End of Semester Examinations	2				
	Semester Totals	15	270	120	390	22
	PRACTICAL MODULES					
EV-FP2	Farm Practical 2	2	-	60	60	2
AG- SP2-						
SP2- IRR	Special Project 2	1	_	30	30	1
EV-AT1	Field Attachment 1	1	_	60	60	2
Lv-All			250			
	Semester Totals	19	270	270	540	27
TX /	Year 2 Semester 2					
EV-	A = 0 = 6 = 0 = 24 = 0	1	1.7	1.7	20	1.5
AGF	Agroforestry	1	15	15	30	1.5
EV- AEV	Agriculture and the Environment	2	45	15	60	3.5
AEV	Agriculture and the Environment		43	15	UU	٥.٥

	Decentralized Environmental					
EV-DEP	Planning	2	45	15	60	3.5
EV-						
EMS	Environmental Management Systems	1	15	15	30	1.5
EV-EPC	Environmental Pollution And Control	2	45	15	60	3.5
RD-						
TSD	Environmental Impact Assessment	2	30	30	60	3
CA-					• •	
CAS	Conservation Agriculture	1	15	15	30	1.5
EV-	Ecosystem Principles and	2	45	16	60	4.5
EPM	Management	2	45	16	60	4.5
	End of Semester Exams	2				
	Semester Totals	15	255	136	390	22.5
	PRACTICAL MODULES					
EV-FP3	Farm Practical 3	2	-	60	60	4
AG- SP3-						
FCP	Special Project 3	1	-	30	30	2
EV-AT3	Field Attachment 3	1	-	30	30	2
2, 1110	Semester Totals	19	255	256	510	30.5
	Semester Totals	17	200	250	310	30.5
	Year 3 Semester One					
EV-	Aquaculture And Fisheries					
AQM	Management	3	60	30	90	5
	Training Skills for Development					
EV-EIA	Facilities	2	45	15	60	3.5
EV-	Environmental Education &					
CBM	Extension	1	15	15	30	1.5
EV-ELP	Environmental Land Use Planning	1	15	15	30	1.5
EV-	Integrated Water Resources					
IWM	Management	3	60	30	90	5
EV-		2	<b>60</b>	20	00	_
SFM	Sustainable Forestry Management	3	60	30	90	5
	End of Semester Examinations	2				
	Semester Totals	15	255	135	390	21.5
	PRACTICAL MODULES					
EV-						
FP4-	Forma Dragtical 4 [Sail 9- Water]	2		60	60	4
NRM EV CD4	Farm Practical 4 [Soil & Water]	2	-	60	60	4
EV-SP4	Special Project 4	1	-	30	30	2
	Semester Totals	18	255	225	480	27.5
	Programme Totals	89	1320	1081	2400	132.0

# 4. Diploma in Irrigation Technology

The program was strategically established to develop capacity of agricultural extension staff in the management and transfer several of irrigation technologies and services so as to achieve sustainable food and income security at household and national level.

Module Code	Module Name	Wks	Theory Hours	Practical Hours	Total Hours	Credit Hours
	Year 1, Semester One					
BS-BIO 111	Biology	3	60	30	90	5.0
BS-MAT 112	Mathematics I	2	45	15	60	3.5
BS-LCS 113	Language & Communication skills	1	15	15	30	1.5
BS-CAP 114	Computer Application	1	15	15	30	1.5
BS-CHE 115	Chemistry	3	60	30	90	5.0
BS-HIV 116	HIV/AIDS, Gender & Development	1	15	15	30	1.5
BS-PHY 117	Physics I	2	30	30	60	3.0
	End of Semester Examinations	2	-	-	-	-
	Semester 1 Totals	15	240	150	390	21
<b>Module Code</b>	Year 1, Semester Two					
RD-COM 121	Community mobilisation	2	30	30	60	3.0
BS-PHY 122	Physics II	1	15	15	30	1.5
IR-TDR 123	Technical Drawing	2	15	45	60	2.5
IR-PIR 124	Principles of Irrigation	3	60	30	90	5.0
CP-PPY 125	Plant Physiology	1	15	15	30	1.5
BS-MAT126	Mathematic II	2	45	15	60	3.5
CP-AGN 127	Agronomy I	2	30	30	60	3.0
	End of Semester Examinations	2	-	-	-	-
	PRACTICAL MODULES					
IR-FPR 121	Farm Practical 1	2	0	60	60	2.0
	[Irrigation Agronomy]					
IR-SPJ 121	Special Project 1 (Situation Analysis)	1	0	30	30	1.0
	Semester 2 Totals	18	210	270	480	23
<b>Module Code</b>	Year 2 Semester One	Wks	Contact	Practical	Total	Cradit
1						Credit
TD 67777.211			hrs	hours	hrs	hrs
IR-SVY 211	Surveying	3	hrs 30	hours 60	<b>hrs</b> 90	<b>hrs</b> 4.0
LD-GIS 212	Introduction to GIS and Remote sensing	3 2	hrs 30 30	60 30	<b>hrs</b> 90 60	<b>hrs</b> 4.0 3.0
LD-GIS 212 IR-FMH 213	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics	3 2 3	30 30 30 45	60 30 45	90 60 90	4.0 3.0 4.5
LD-GIS 212 IR-FMH 213 IR-IWM 214	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management	3 2 3 3	hrs 30 30 45 60	60 30 45 30	90 60 90 90	hrs 4.0 3.0 4.5 5.0
LD-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems	3 2 3 3 1	30 30 45 60	hours 60 30 45 30 15	90 60 90 90 30	4.0 3.0 4.5 5.0 1.5
LD-GIS 212 IR-FMH 213 IR-IWM 214	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics	3 2 3 3 1 1	hrs 30 30 45 60	60 30 45 30	90 60 90 90	hrs 4.0 3.0 4.5 5.0
LD-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations	3 2 3 3 1	30 30 45 60	hours 60 30 45 30 15	90 60 90 90 30	4.0 3.0 4.5 5.0 1.5
LD-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES	3 2 3 3 1 1 2	hrs 30 30 45 60 15 30	hours 60 30 45 30 15 0	90 60 90 90 30 30	4.0 3.0 4.5 5.0 1.5 2.0
LD-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management]	3 2 3 3 1 1 2	hrs 30 30 45 60 15 30 -	hours 60 30 45 30 15 0 60	90 60 90 90 30 30 -	hrs 4.0 3.0 4.5 5.0 1.5 2.0 -
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216 IR-FPR 212 IR-SPJ 212	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture]	3 2 3 3 1 1 2	hrs 30 30 45 60 15 30 - 0 0	hours 60 30 45 30 15 0 - 60 30	90 60 90 90 30 30 - 60 30	hrs 4.0 3.0 4.5 5.0 1.5 2.0 - 2.0 1.0
LD-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1	3 2 3 3 1 1 2 2	hrs 30 30 45 60 15 30 - 0 0	hours 60 30 45 30 15 0 - 60 30 30 30	90 60 90 90 30 30 - 60 30 30	hrs 4.0 3.0 4.5 5.0 1.5 2.0 - 2.0 1.0
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture]	3 2 3 3 1 1 2 2 1 1 19	9 hrs 30 30 45 60 15 30 - 0 0 210	60 30 45 30 15 0 - 60 30 30 30 30	90 60 90 90 30 30 - 60 30 510	hrs 4.0 3.0 4.5 5.0 1.5 2.0 - 2.0 1.0 1.0 24
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216 IR-FPR 212 IR-SPJ 212	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals	3 2 3 3 1 1 2 2	9 hrs 30 30 45 60 15 30 0 0 210 Contact	60 30 45 30 15 0 60 30 30 7 45 9 7 7 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	90 60 90 90 30 30 - 60 30 30 510	1.0 2.0 1.0 2.0 1.0 2.4 Credit
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2	3 2 3 3 1 1 2 2 1 1 1 19 Wks	0 0 210 Contact	60 30 45 30 15 0 60 30 30 Practical hours	90 60 90 90 30 30 - 60 30 30 510 Total	1.0 2.0 1.0 2.0 1.0 2.4 Credit hrs
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code  RD-RME 221	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2 Research Methods, Monitoring & Evaluation	3 2 3 3 1 1 2 2 1 1 19 Wks	hrs 30 30 45 60 15 30 - 0 0 210 Contact hrs 45	60 30 45 30 15 0 60 30 30 0 Practical hours	hrs 90 60 90 30 30 60 30 30 510 Total hrs	1.0 2.0 1.0 2.0 1.0 24 Credit hrs
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code  RD-RME 221  IR-IEM 222	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2 Research Methods, Monitoring & Evaluation Irrigation equipment and machinery	3 2 3 3 1 1 2 2 1 1 19 Wks	9 hrs 30 30 45 60 15 30 0 0 0 210 Contact hrs 45	60 30 45 30 15 0 60 30 30 7 60 30 30 30 30 31 30 Practical hours 15	hrs 90 60 90 90 30 30 60 30 30 510 Total hrs 60	1.5 2.0 1.0 2.0 1.0 2.4 Credit hrs 3.5
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code  RD-RME 221  IR-IEM 222 EV-SWC 223	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2 Research Methods, Monitoring & Evaluation Irrigation equipment and machinery Soil and water conservation	3 2 3 3 1 1 2 2 1 1 19 Wks	0 0 210 Contact hrs 45 45	60 30 45 30 15 0 60 30 30 30 15 15 15 45	hrs 90 60 90 90 30 30 30 60 30 510 Total hrs 60 30 90	1.5 2.0 1.0 2.0 1.0 24 Credit hrs 3.5
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code  RD-RME 221  IR-IEM 222 EV-SWC 223 IR-HYA 224	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2 Research Methods, Monitoring & Evaluation Irrigation equipment and machinery	3 2 3 3 1 1 2 2 1 1 19 Wks 2	0 0 0 210 Contact hrs 45 30	60 30 45 30 15 0 60 30 30 15 0 15 15 15 45 30	hrs 90 60 90 90 30 30 60 30 30 510 Total hrs 60	1.5 2.0 1.0 2.0 1.0 2.4 Credit hrs 3.5
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code  RD-RME 221  IR-IEM 222 EV-SWC 223	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2 Research Methods, Monitoring & Evaluation Irrigation equipment and machinery Soil and water conservation	3 2 3 3 1 1 2 2 1 1 19 Wks 2 1 3 2 3 3 3	0 0 210 Contact hrs 45 45	60 30 45 30 15 0 60 30 30 30 15 15 15 45	hrs 90 60 90 90 30 30 30 60 30 510 Total hrs 60 30 90	1.5 2.0 1.0 2.0 1.0 24 Credit hrs 3.5
ID-GIS 212 IR-FMH 213 IR-IWM 214 IR-IDS 215 IR-EME 216  IR-FPR 212 IR-SPJ 212 IR-FAT 211  Module Code  RD-RME 221  IR-IEM 222 EV-SWC 223 IR-HYA 224	Introduction to GIS and Remote sensing Fluid mechanics and Hydraulics Irrigation Water Management Irrigation Drainage Systems Engineering materials and Economics End of Semester Examinations PRACTICAL MODULES Farm Practical 2 [Water Management] Special Project 2 [Irrigation/Horticulture] Field Attachment 1 Semester 3 Totals  Year 2 Semester 2 Research Methods, Monitoring & Evaluation Irrigation equipment and machinery Soil and water conservation Hydrology & Agrometeorology	3 2 3 3 1 1 2 2 1 1 19 Wks 2	0 0 0 210 Contact hrs 45 30	60 30 45 30 15 0 60 30 30 15 0 15 15 15 45 30	hrs 90 60 90 90 30 30 30 60 30 510 Total hrs 60 30 90 60	1.5 2.0 1.0 2.0 1.0 24 Credit hrs 3.5 4.5 3.0

	PRACTICAL MODULES					
IR-FPR-223	Farm Practical 3 [Irrigation systems	2	0	60	60	2.0
	design]					
IR-SPJ 223	Special Project 3 [Soil & water	1	0	30	30	1.0
	conservation]					
IR-FAT 222	Field Attachment 2	11/2	0	45	45	1.5
	Semester 4 Totals	191/2	225	300	525	25
<b>Module Code</b>		Wks	Contact	Practical	Total	Credit
	Year 3 Semester One		hrs	hours	hrs	hrs
CP-AGN 311	Agronomy II	2	30	30	60	3.0
EV-EIA 312	Environmental Impact Assessment (EIA)	2	30	30	60	3.0
RD-EBM 313	Entrepreneurship and Business	3	45	45	90	4.5
	Management					
EV-CCA 314	Climate change and adaptation	1	15	15	30	1.5
IR-HYG 315	Hydrogeology	2	45	15	60	3.5
IR-ISM 316	Irrigation Scheme Management	2	45	15	60	3.5
EV-NRM 317	Community Based Natural Resources	1	15	15	30	1.5
	Management					
	<b>End of Semester Examinations</b>	2	-	-	-	-
	PRACTICAL MODULES					
IR-FPR 314	Farm Practical 4 [Entrepreneurship]	2	0	60	60	2.0
IR-SPJ 314	Special Project 4 [Irrigation]	1	0	30	30	1.0
IR-FAT 313	Field Attachment 3	1	0	30	30	1.0
	Semester 5 Totals	19	225	285	510	24.5
	Programme Totals	90.5	1110	1305	2415	117.5

## 5. Diploma in Land Administration

The policy change in the Malawi Government has not only called for changing attitudes in people but also change in the focus, attitudes, and skills of the extension service providers in land administration. For this reason, the department felt challenged to provide training that meets these demands. A curriculum that is responsive to the current needs and challenges facing the country was developed to tackle extension service in terms of Land management since proper management of the Land can bring a significant change to the country's agricultural system which is the major driver of the Malawi's economy

Module	Module Name	Weeks	Lecture	Practical	Total	Credit
Code			hours	hours	hours	Hours
	Year 1, Semester 1					
ARD-111	Introduction to Economics	1	15	15	30	1.5
LCS-111	Language and Communication skills	2	45	15	60	3.5
CAP-111	Mathematics	1	15	15	30	1.5
MAT-111	Physics	2	30	30	60	3
PRT-212	Introduction to Printing Technology	1	15	15	30	1.5
RSP-212	Introduction to Remote Sensing and	1	15	15	30	1.5
	Photogrammetry					
QSY-227	Quantity surveying	2	30	30	60	3
PLD-215	Planning Law and Development	2	45	15	60	3.5

	Control					
LEM216	Introduction to Environmental	1	15	15	30	1.5
	Management					
	End of Semester Examinations	2	225	165	390	20.5
	Semester 1 Totals	15				
	Field Attachment (1)	4				
	77 1 0					
	Year 1, Semester 2		4		20	
LFM-224	Principles of Financial Management	1	15	15	30	1.5
GLA-122	Governance and Land Administration	1	15	15	30	1.5
NDP-311	National Development Policies and Strategies	1	15	15	30	1.5
SPO-221	Introduction to Space Observation	1	15	15	30	1.5
HYS-222	Hydrographic and Engineering Surveying	2	30	30	60	3
UIS-313	Urbanization and Informal Settlement	2	45	15	60	3.5
LLA-123	Land Law and Administration	1	15	15		1.5
BAD-225	Business Administration and Organization Development	2	45	15	60	3.5
LTC-226	Land Lord, Tenant Law and Conveyance	2	30	30	60	3
	End of Semester Examinations	2	225	165	390	20.5
	Semester 2 Totals	15				
	Field Attachment (2)	6				
	Year 2 Semester 1					
BUT-214	Building Technology	2	30	30	60	3
PIA-228	Property Investment and Appraisal	1	15	15	30	1.5
PRD-312	Property Development	3	45	45	90	4.5
TPA-317	Transport Planning and Administration	2	45	15	60	3.5
EAA-316	Estate Agency and Auctioneering	3	60	30	90	5
PPE-314	Introduction to Professional Practice and Ethics	2	45	15	60	1.5
	End of Semester Examinations	2	240	150	390	19
	Semester 3 Totals	15				