

Bachelor of Applied Science – Extended Majors

QTAC Code for all Gatton majors: 780169

QTAC Code for St Lucia Majors: 703031 (Food Science and Nutrition) or
704031 (Integrated Resource Management)

Program Code: 2240

Equine Science Extended Major

Academic Advisors: Dr Judy Cawdell-Smith, email: j.cawdellsmith@uq.edu.au
Dr Mark Hohenhaus, email: m.hohenhaus@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

Important Equine Information: www.animal.uq.edu.au/docs/Equine.Info.pdf

^c If student does not have Senior Chemistry and / or Mathematics B

CHEM1002 Agricultural & Environmental Chemistry I = Year 12 Chemistry

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments
AGRC1018	2	Introductory Biology	AGRC1019	2	Plant and Animal Biology
ANIM1003	2	Animal Structure & Function	ANIM2011	2	Animal Physiology
CHEM1002 OR ANIM1014	2	Agricultural & Environmental Chemistry I ^c OR Animal Welfare, Behaviour & Handling	CHEM1003	2	Agricultural & Environmental Chemistry II
THIRD SEMESTER			FOURTH SEMESTER		
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	AGRC2013	2	Agricultural Microbiology and Gene Technology
AGRC2001	2	Agricultural Biochemistry	ANIM2039	2	Equine Stud Management
ANIM1006	2	Equine Husbandry & Equitation I	ANIM3040	2	Animal Nutrition
ANIM1014 OR STAT2701	2	Animal Welfare, Behaviour and Handling ^c OR Biometrics I	AGRC1017 OR Elective	2	Agricultural Mathematics ^c OR MGTS1960 recommended
FIFTH SEMESTER			SIXTH SEMESTER		
ANIM2002	2	Animal Breeding & Genetics	ANIM3006	2	Animal Health & Epidemiology
ANIM3019	2	Animal Reproduction	ANIM3030	2	Equine Nutrition & Health
ANIM3039	2	Equine Exercise & Rehabilitation		2	Elective (from BAppSc list).
STAT2701 OR Elective	2	Biometrics I ^c OR Elective (from BAppSc list) - ANIM2024 or MGTS2961 recommended		2	Elective

Recommended Electives

FIRST SEMESTER			SECOND SEMESTER		
ANIM2006	2	Equestrian Coach Education	AGRC1016	2	Food & Fibre in the E-Landscape
ANIM2024	2	Horse Behaviour and Handling	AGRC3006	2	Pasture Science
MGTS2961	2	Working with Groups and Teams	ANIM1966	2	Equine Husbandry & Equitation II
MKTG1502	2	Agriculture & Food Industry Marketing	MGTS1960	2	Business Management I

Food Science and Nutrition Extended Major (Food Science Option)

Academic Advisor: Professor Bhesh Bhandari, email: b.bhandari@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	BIOL1040	2	Cells to Organisms
BIOL1020	2	Genes Cells & Evolution	CHEM1020	2	Chemistry - Energetics & Reactivity
CHEM1030	2	Chemistry - Structure & Reactions		2	Elective
FOOD2006	2	Principles of Food Preservation		2	Elective
THIRD SEMESTER			FOURTH SEMESTER		
BIOC2000	2	Biochemistry & Molecular Biology	FOOD3018	2	Food Chemistry
NUTR2101	2	Nutrition Science	MICR3861	2	Food Microbiology I
STAT2701	2	Biometrics I	NUTR2201	2	Advanced Topics in Nutrition Science
	2	Elective		2	Elective
FIFTH SEMESTER			SIXTH SEMESTER		
FOOD3007	2	Food Structure and Sensory Science	AGRC2014	2	Problem Solving in Natural & Agrifood Systems
FOOD3015	2	Chemical Food Analysis	FOOD3006	2	Food Science
FOOD3017	2	Food Safety and Quality Management	FOOD3011	2	Food Product Development
MICR3860	2	Food Microbiology II	NUTR3012	2	Community and Public Health Nutrition

Food Science and Nutrition Extended Major (Nutrition Science Option)

Academic Advisor: Professor Bhesh Bhandari, email: b.bhandari@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	BIOL1040	2	Cells to Organisms
BIOL1020	2	Genes Cells & Evolution	CHEM1020	2	Chemistry - Energetics & Reactivity
CHEM1030	2	Chemistry - Structure & Reactions		2	Elective
FOOD2006	2	Principles of Food Preservation		2	Elective
THIRD SEMESTER			FOURTH SEMESTER		
BIOC2000	2	Biochemistry & Molecular Biology	FOOD3018	2	Food Chemistry
NUTR2101	2	Nutrition Science	MICR3861	2	Food Microbiology I
STAT2701	2	Biometrics I	NUTR2201	2	Advanced Topics in Nutrition Science
	2	Elective (Nutrition Science Option)		2	Elective (Nutrition Science Option)
FIFTH SEMESTER			SIXTH SEMESTER		
	2	Elective (Nutrition Science Option)	AGRC2014	2	Problem Solving in Natural & Agrifood Systems
	2	Elective (Nutrition Science Option)	FOOD3006	2	Food Science
	2	Elective	FOOD3011	2	Food Product Development
	2	Elective	NUTR3012	2	Community and Public Health Nutrition

Recommended Electives

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
BIOL3230	2	Endocrinology & Metabolism	BIOM2012	2	Systems Physiology
BIOM2011	2	Integrative Cell & Tissue Biology	HMST1023	2	Health & Fitness Through Diet & Exercise
HMST2730	2	Exercise Physiology	NUTR3000	2	Nutrition & Exercise
HPRM3000	2	Health Promotion: Perspectives and Practices	NUTR3003	2	Nutrition Project
NUTR3011	2	Understanding Population Nutrition	PUBH1103	2	Health Systems & Policy
PUBH1102	2	Introduction to Population Health	PUBH2004	2	Understanding Health Behaviours
			PUBH2007	2	Health Research Methods
			PSYC1030	2	Introduction to Psychology: Developmental, Social and Clinical Psychology

Integrated Resource Management Extended Major

Academic Advisor: Dr Carl Smith, email: c.smith2@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	ENVM1512	2	Ecological Economics
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	ENVM2503	2	Environment and Community
BIOL1030	2	Biodiversity and Our Environment	GEOM1000	2	Geographical Information and Analysis
FRST1001	2	Tropical Systems in the Asia Pacific	GEOS1100	2	Environment and Society
THIRD SEMESTER			FOURTH SEMESTER		
ENVM2200	2	Resource Management and Environmental Planning	AGRC2014	2	Problem Solving in Natural & Agrifood Systems
ENVM3103	2	Regulatory Frameworks for Environmental Management and Planning	ENVM2521 OR FRST3004	2	Research, Development and Extension Practice OR Asia/Pacific Tropical Forest Management and Extension Tour
STAT2701	2	Biometrics I	ENVM3518	2	Environment and Development
	2	Elective (from BAppSc course list) *		2	Elective (from BAppSc course list) *
FIFTH SEMESTER			SIXTH SEMESTER		
AGRC3025	2	Decision Support Systems for Natural and Agrifood Systems	AGRC3027	2	Agricultural and Resource Policy
ENVM3523	2	Natural Resource Management	SOCY2020	2	Sociology of the Environment
ENVM3526	2	Systems Thinking Systems Dynamics (for a Complex World)		2	Elective *
LAND3007	2	Land Use and Management		2	Elective *

Recommended Electives

* #8 units to be undertaken. Refer to Part D Electives for Integrated Resource Management on the following website:

http://www.uq.edu.au/study/program_list.html?acad_prog=2240

Parks and Wildlife Management Extended Major

Academic Advisor: Assoc Prof Marc Hockings, email: m.hockings@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

^cIf student does not have Senior Mathematics B

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	AGRC1017 OR AGRC1014	2	Agricultural Mathematics ^c OR Plant Utilisation in Natural & Agricultural Environments
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1019	2	Plant and Animal Biology
AGRC1018	2	Introductory Biology	ENVM2504	2	Regulatory Frameworks in Environmental Management
ANIM1014	2	Animal Welfare, Behaviour and Handling	GEOM1960	2	Introduction to Remote Sensing and GIS
THIRD SEMESTER			FOURTH SEMESTER		
AGRC2019	2	Ecology of Natural and Agricultural Systems	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments ^c OR Elective
ENVM2519	2	National Park Management	AGRC2014	2	Problem Solving in Natural & Agrifood Systems
LAND2003	2	The Soil Environment		2	Elective
LPWM2008	2	Cultural Heritage Management	ENVM2512	2	Fire Management
FIFTH SEMESTER			SIXTH SEMESTER		
ENVM3519	2	Visitors in Sensitive Environments	ANIM3018	2	Wildlife Technologies
LPWM2003	2	Principles of Wildlife Management	ENVM3506	2	International & National Conservation Policy
STAT2701	2	Biometrics I	ENVM3517	2	Contemporary Protected Area Management
	2	Elective (from BAppSc list)		2	Elective

Suggested Electives (from BAppSc course list)

FIRST SEMESTER			SECOND SEMESTER		
GEOM3002	2	Geographical Information Systems	ENVM1511	2	Principles and Practices of Interpretation
LAND3013	2	Integrated Landscape Management	ENVM3504	2	Environment, Sustainability and Ecotourism
LPWM2006	2	Fisheries Science	ENVM3506	2	International and National Conservation Policy
			ENVM3520	2	Environmental Restoration
			LPWM2000	2	Marine & Coastal Environmental Protection
			LPWM2005	2	Fisheries Management
			LPWM2007	2	Environmental Management Field Studies
			LPWM3002	2	Sustainable Wildlife Use and Conservation

Plants Extended Major

Academic Advisors: Dr Doug George, email: d.george@uq.edu.au / Dr Margaret Johnston, email: m.johnston@uq.edu.au
 Program Requirements: 30 days Industry Practice work experience

^cIf student does not have Senior Chemistry and / or Mathematics B

CHEM1002 Agricultural & Environmental Chemistry I = Year 12 Chemistry

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1017 OR MGTS1960	2	Agricultural Mathematics ^c OR Business Management I
AGRC1018	2	Introductory Biology	AGRC1019	2	Plant and Animal Biology
CHEM1002 OR ANIM1014	2	Agricultural and Environmental Chemistry I ^c OR Animal Welfare, Behaviour & Handling	CHEM1003	2	Agricultural & Environmental Chemistry II
THIRD SEMESTER			FOURTH SEMESTER		
AGRC2009	2	Plant Production Technology	AGRC2020	2	Agronomy
HORT2007	2	Horticultural Science	MGTS1960	2	Business Management I OR Elective
LAND2003	2	The Soil Environment	PLNT2002	2	Plant Physiology
STAT2701	2	Biometrics I	PLNT2011	2	Plant & Environmental Health
FIFTH SEMESTER			SIXTH SEMESTER		
ANIM1014	2	Animal Welfare, Behaviour & Handling OR Elective	AGRC3002 OR AGRC3006 OR HORT3003 OR HORT3008	2	Select (# 4) 2 courses from those listed below: Crop Production Science OR Pasture Science OR Production Horticulture OR Lifestyle Horticulture
LAND3005	2	Soil-Plant Relationships	AGRC2013 OR GNET2001	2	Agricultural Microbiology & Gene Technology OR Agricultural Genetics & Biotechnology
LAND3007	2	Land Use & Management		2	Elective (from BAppSc List)
	2	Elective			

Note: AGRC3020 Industrial Placement (#4) is strongly recommended as the fifth semester #4 elective choice

Production Animal Science Extended Major

Academic Advisor: Dr John Gaughan, email: j.gaughan@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

^cIf student does not have Senior Chemistry and / or Mathematics B

CHEM1002 Agricultural & Environmental Chemistry I = Year 12 Chemistry

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments
AGRC1018	2	Introductory Biology	AGRC1019	2	Plant and Animal Biology
ANIM1003	2	Animal Structure & Function	ANIM2011	2	Animal Physiology
CHEM1002 OR ANIM1014	2	Agricultural and Environmental Chemistry I ^c OR Animal Welfare Behaviour & Handling	CHEM1003	2	Agricultural & Environmental Chemistry II
THIRD SEMESTER			FOURTH SEMESTER		
AGRC2001	2	Agricultural Biochemistry	AGRC1017 OR ANIM2021	2	Agricultural Mathematics ^c OR Animal Biometeorology
ANIM1014 OR AGRC1010	2	Animal Welfare, Behaviour and Handling ^c OR Systems Thinking & Practice for Environmental & Agrifood Industries	AGRC2013	2	Agricultural Microbiology and Gene Technology
ANIM2002	2	Animal Breeding & Genetics	ANIM3040	2	Animal Nutrition
Elective	2	Elective from BAppSc list ANIM2041 recommended		2	Elective ANIM2042 recommended
FIFTH SEMESTER			SIXTH SEMESTER		
ANIM3013	2	Intensive Animal Production	ANIM3006	2	Animal Health & Epidemiology
ANIM3019	2	Animal Reproduction	ANIM3011	2	Animal Production & Product Quality
STAT2701	2	Biometrics I	ANIM3012	2	Extensive Animal Production
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries ^c OR Elective	ANIM2021 OR Elective	2	Animal Biometeorology ^c OR Elective

Recommended Electives

FIRST SEMESTER			SECOND SEMESTER		
ANIM2041	2	Livestock Industries	AGRC1016	2	Food & Fibre in the E-Landscape
MKTG1502	2	Agriculture & Food Industry Marketing	AGRC3006	2	Pasture Science
MGTS2961	2	Working with Groups and Teams	ANIM2040	2	Animal Biosecurity
			MGTS1960	2	Business Management I

Rural Management Extended Major – Modified 20-5-2010

Academic Advisor: Mr Steve Beasley, email: s.beasley@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

^cIf student does not have Senior Chemistry and / or Mathematics B

CHEM1002 Agricultural & Environmental Chemistry I = Year 12 Chemistry

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	AGRC1017 OR CHEM1003	2 2	Agricultural Mathematics ^c OR Agricultural & Environmental Chemistry II
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments
AGRC1018	2	Introductory Biology	AGRC1019	2	Plant and Animal Biology
ANIM1003	2	Animal Structure & Function	MGTS1960	2	Business Management I
THIRD SEMESTER			FOURTH SEMESTER		
ANIM1014	2	Animal Welfare, Behaviour and Handling	AGRC2020	2	Agronomy
CHEM1002 OR ANIM2041	2 2	Agricultural and Environmental Chemistry I ^c OR Livestock Industries	ANIM2042	2	Livestock Management & Production
LAND2003	2	The Soil Environment	CHEM1003	2 2	Agricultural & Environmental Chemistry II ^c OR Elective
MKTG1502	2	Agriculture & Food Industry Marketing	ENVM1512	2	Ecological Economics
FIFTH SEMESTER			SIXTH SEMESTER		
ANIM2041	2 2	Livestock Industries OR Elective	AGRC3026	2	Comparative International Farm Systems Case Studies
ENVM3526	2	Systems Thinking Systems Dynamics (For a complex World)	AGRC3002 OR AGRC3006 OR PLNT2011	2 2 2	Crop Production Science OR Pasture Science OR Plant & Environmental Health
FINM3960	2	Investment Project Appraisal		2	Elective (from BAppSc list)
STAT2701	2	Biometrics I		2	Elective (from BAppSc list)

Rural Management Extended Major Recommended Electives

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
LPWM3004	2	Northern & Tropical Queensland Tour	LPWM3003	2	Tropical Natural & Rural Systems Tour
MGTS2961	2	Working with Groups & Teams	LPWM3004	2	Northern & Tropical Queensland Tour

Veterinary Technology Extended Major

Academic Advisor: Mr Andrew Tribe, email: a.tribe@uq.edu.au

Program Requirements: 30 days Industry Practice work experience

^cIf student does not have Senior Chemistry and / or Mathematics B

CHEM1002 Agricultural & Environmental Chemistry I = Year 12 Chemistry

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments
AGRC1018	2	Introductory Biology	AGRC1019	2	Plant and Animal Biology
ANIM1003	2	Animal Structure & Function	ANIM2011	2	Animal Physiology
CHEM1002 OR ANIM1014	2	Agricultural & Environmental Chemistry I ^c OR Animal Welfare, Behaviour & Handling	CHEM1003	2	Agricultural & Environmental Chemistry II
THIRD SEMESTER			FOURTH SEMESTER		
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	AGRC1017 OR Elective	2	Agricultural Mathematics ^c OR Elective VETS2001 recommended
AGRC2001	2	Agricultural Biochemistry	ANIM3006	2	Animal Health & Epidemiology
ANIM1014 OR STAT2701	2	Animal Welfare, Behaviour & Handling ^c OR Biometrics I	ANIM3040	2	Animal Nutrition
ANIM2002	2	Animal Breeding & Genetics		2	Elective AGRC2013 recommended
FIFTH SEMESTER			SIXTH SEMESTER		
ANIM3019	2	Animal Reproduction	VETS3018	2	Large Animal Health & Management
STAT2701 OR Elective	2	Biometrics I ^c OR Elective VETS3017 recommended	VETS3019	4	Practice Skills & Diagnostics
VETS3009	2	Small Animal Health		2	Elective ANIM2038 recommended
VETS3020	2	Surgical Principles & Practices			

Recommended Electives

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
VETS3017	2	Animal Therapeutics	AGRC2013	2	Agricultural Microbiology and Gene Technology
			ANIM2038	2	Animal Ethics, Codes of Practice and Legislation
			ANIM3043	2	The Behaviour & Management of Animals in Society
			MGTS1960	2	Business Management I
			VETS2001	2	Animal Health Technology

Wildlife Science Extended Major

Academic Advisor: Dr Peter Murray, email: peter.murray@uq.edu.au
 Program Requirements 30 days Industry Practice work experience

^cIf student does not have Senior Chemistry and / or Mathematics B

CHEM1002 Agricultural & Environmental Chemistry I = Year 12 Chemistry

AGRC1017 Agricultural Mathematics = Year 12 Mathematics B

FIRST SEMESTER			SECOND SEMESTER		
Code	#	Title	Code	#	Title
AGRC1015	2	Knowledge Management in Natural & Agrifood Systems	AGRC1014	2	Plant Utilisation in Natural & Agricultural Environments
AGRC1018	2	Introductory Biology	AGRC1017 OR ANIM2011	2	Agricultural Mathematics ^c OR Animal Physiology
ANIM1003	2	Animal Structure and Function	AGRC1019	2	Plant and Animal Biology
CHEM1002 OR ANIM1014	2	Agricultural & Environmental Chemistry I ^c OR Animal Welfare, Behaviour and Handling	CHEM1003	2	Agricultural & Environmental Chemistry II
SUMMER SEMESTER					
ANIM1014	2	Animal Welfare, Behaviour and Handling ^c			
THIRD SEMESTER			FOURTH SEMESTER		
AGRC1010	2	Systems Thinking & Practice for Environmental & Agrifood Industries	ANIM2011 OR Elective	2	Animal Physiology ^c OR Elective ANIM2040 recommended
AGRC2019	2	Ecology of Natural and Agricultural Systems	ANIM3006	2	Animal Health & Epidemiology
ANIM2005	2	Australian Terrestrial Vertebrates	ANIM3018	2	Wildlife Technologies
STAT2701	2	Biometrics I		2	Elective ANIM2040 recommended
FIFTH SEMESTER			SIXTH SEMESTER		
AGRC2001	2	Agricultural Biochemistry	ANIM3016	2	Captive Wildlife Husbandry
ANIM2002	2	Animal Breeding & Genetics	ANIM3040	2	Animal Nutrition
ANIM3019	2	Animal Reproduction		2	Elective (from BAppSc list) ANIM3043 recommended
LPWM2003	2	Principles of Wildlife Management		2	Elective (not ^c) LPWM3005 recommended

Recommended Electives

FIRST SEMESTER			SECOND SEMESTER		
AGRC2015	2	Short International Experience	AGRC2013	2	Agricultural Microbiology and Gene Technology
			AGRC2015	2	Short International Experience
			ANIM2021	2	Animal Biometeorology
			ANIM2040	2	Animal Biosecurity
			ANIM3043	2	The Behaviour and Management of Animals in Society
			LPWM2007	2	Environmental Management Field Studies
			LPWM3002	2	Wildlife Utilisation & Marketing
			LPWM3005	2	Game Management