



MASTER OF SCIENCE IN AGROECOLOGY

MSc (Agroecology)

Sri Lanka Qualifications Framework Level (SLQL) 10
Faculty of Agriculture
Rajarata University of Sri Lanka

STUDENT HANDBOOK



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Master of Science in Agroecology

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Faculty of Agriculture,
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ശ്രീ. കെ. ജി. ജോർജ്ജ്
1904 - 1988
കേരള സർവ്വകലാശാലയുടെ
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1961 - 1968

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MESSAGE FROM THE VICE CHANCELLOR



I extend my warmest greetings to each of you as we embark on this incredible journey with the beginning of the Agroecology Masters Program within the Faculty of Agriculture at Rajarata University of Sri Lanka. The Agroecology Masters Program is an exciting chapter in our university's history and demonstrates our dedication to creating positive change in the field of agriculture.

This program has been meticulously designed to nurture innovative and knowledgeable graduates capable of fostering sustainable development in agroecology and related industries. You will have numerous opportunities to broaden your horizons in this field and make meaningful contributions to sustainable agriculture.

Rajarata University has a long history of excellence in education and research. Our university is ranked among the top institutions in the country, and we have established strong international relations with leading universities and research organizations worldwide. These connections provide our students and faculty with unique opportunities for collaboration and exchange, further enriching the learning experience. With the launch of this program, we are entering a new era, focused on the concepts of agroecology that explore the complex relationships between ecology, society, and economics. I invite you to seize this once-in-a-lifetime opportunity with passion and determination.

I eagerly anticipate the positive changes and contributions that you will bring to the world of agriculture. I wish you an exciting and successful journey ahead

Prof. (Mrs.) G.A.S. Ginigaddara
Vice Chancellor, Rajarata University of Sri Lanka

MESSAGE FROM THE DEAN



Agroecology, at its core, represents a fusion of agricultural principles and ecological wisdom to address the pressing challenges facing our agricultural systems. It offers a path toward sustainable food production, environmental stewardship, and enhanced livelihoods for farming communities. As the Dean of the Faculty of Agriculture, I am delighted to welcome new, talented individuals who have chosen to embark on a journey of learning, discovery, and innovation in the field of agroecology.

At Rajarata University, we are dedicated to providing you with a world-class education that will prepare you to be future leaders in agroecology. Our staff members are experts in their fields and are committed to guiding you through a rigorous academic program that incorporates both theoretical understanding and practical experience. The Faculty of Agriculture, located in Anuradhapura; the Dy Zone of Sri Lanka, is the ideal place to master agroecology. We have the laboratories and all other resources necessary to deliver this master's program successfully.

You will have the opportunity to participate in novel studies, collaborate with local communities, and contribute to the creation of long-term agricultural solutions. I eagerly anticipate your growth and success as you complete the Agroecology Master's Program, which will not only shape your profession but also contribute to the global sustainability of agriculture.

Once again, I extend my heartfelt welcome to our Agroecology Master's Program, and I wish you the very best in your academic journey and future endeavors.

Prof. G.V.T.V. Weerasooriya
Dean, Faculty of Agriculture, RUSL

MESSAGE FROM THE POST GRADUATE PROGRAMME DIRECTOR



It is with great pleasure that I as the Postgraduate Programme Director and Coordinator of Curriculum Development in Agroecology (CDAE) Project welcome all the students who have registered for the first Master of Science in Agroecology degree program in Sri Lanka. This is a SLQF Level 10 master's degree developed under the auspices of the CDAE project, funded by the European Union's Erasmus grant. The program is a collaborative effort by a consortium consisting of three European and six Asian partners, adhering to the highest European standards (ECTS).

The Master of Science in Agroecology is a two-year degree program comprising coursework, a research component, and an internship, covering 60 SLQF credits equivalent to 120 ECTS. The main objective of the program is to educate professionals (farmers, agricultural specialists) with essential knowledge, transferable skills, and experience, thereby enhancing their employability through specialized knowledge and participation in internship programs. It is designed to equip students with the knowledge, skills, and attitude needed to address pressing challenges in agriculture and its sustainability.

Postgraduate programs in the Faculty of Agriculture at Rajarata University of Sri Lanka are committed to excellence in teaching and research. We feature modern laboratories, comprehensive computer facilities, a well-stocked library, and smart classrooms. Our esteemed faculty members, recognized for their scholarly contributions and research expertise, are dedicated to mentoring our students and enriching their educational journey. We believe that the discipline and work ethic developed here will be invaluable throughout your professional careers.

Congratulations on your decision to join us, and I look forward to seeing the impact you will make in the world of agroecology.

Dr. A.M.K.R. Bandara
Postgraduate Programme Director

MESSAGE FROM THE PROGRAMME COORDINATOR



It is with great pleasure and excitement that we welcome you to the newly launching Master of Science in Agroecology program at the Faculty of Agriculture, Rajarata University of Sri Lanka. This program marks an important milestone in our commitment to promoting sustainable agriculture practices and advancing the field of Agroecology.

We take pride in our commitment to academic quality at Rajarata University, and this program is no exception. You may expect an exciting and practical program which includes classroom instruction, research projects, and hands-on experiences. The program offers excellent facilities and resources for research, allowing you to contribute to the advancement of agroecological science. Our committed faculty members are professionals in their fields, and they are here to guide and support you throughout your academic journey.

As you begin your studies, I urge you to take advantage of this unique opportunity. Participate in class discussions, collaborate with your peers, and take advantage of the variety of resources accessible to you at our Faculty. You will have the chance to connect with professionals and experts in the field, building valuable networks that can open doors to various career opportunities. Your contributions will be critical in determining the future of sustainable agriculture and food systems, as agroecology thrives on innovation and innovative thinking.

I would like to emphasize the importance of maintaining a strong work ethic, discipline, and a commitment to learning. The path to success in the Master of Science in Agroecology program may present challenges, but with dedication and determination, you may overcome them and achieve your academic and career goals.

Our doors are always open for questions, concerns, and assistance. I look forward to seeing your academic advancement and the positive impact you will undoubtedly make in the field of Agroecology. Together, we can address critical global challenges related to food security, environmental sustainability, and social equity.

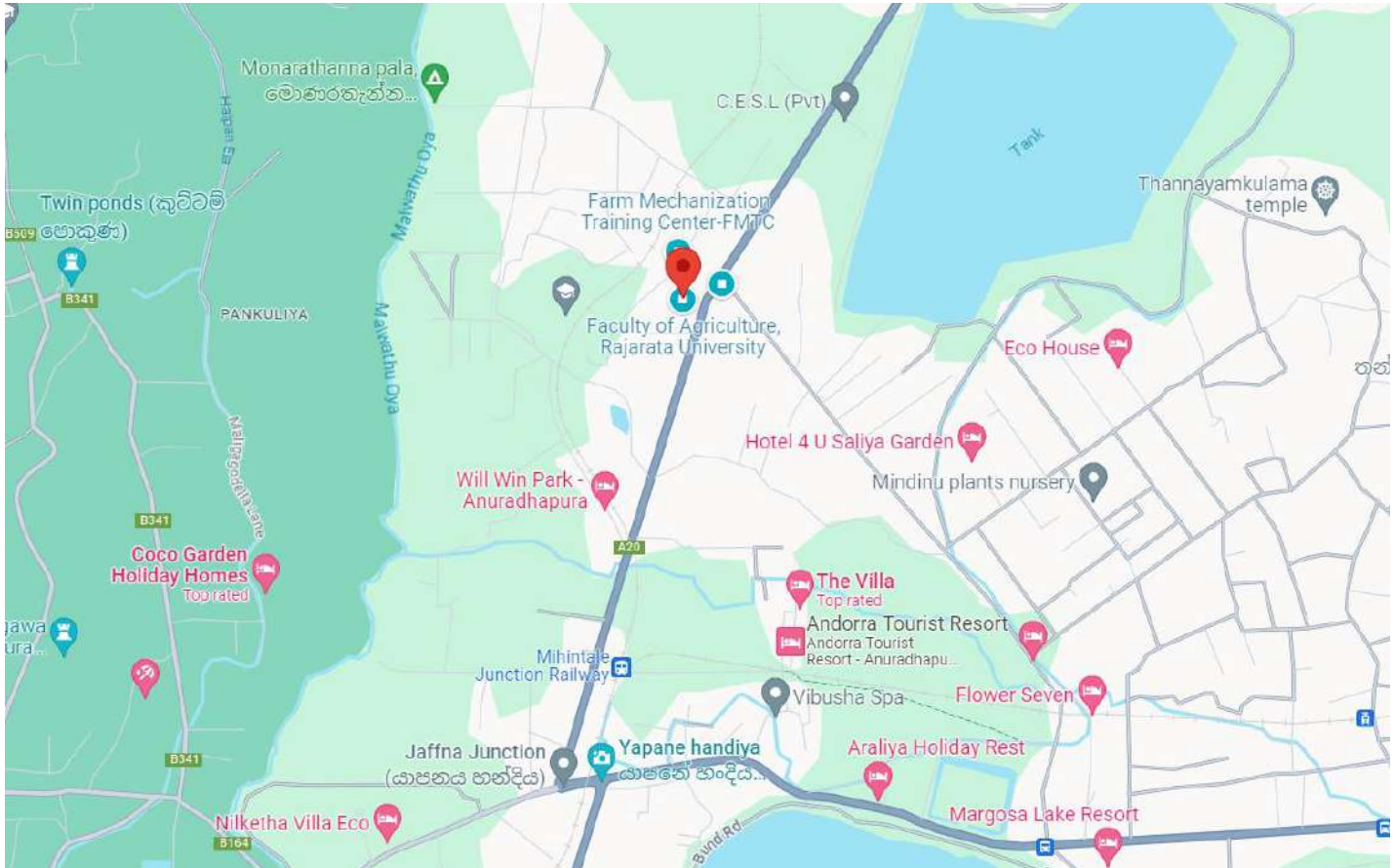
Once again, welcome to the Master of Science in Agroecology program at the Faculty of Agriculture, Rajarata University of Sri Lanka. Your journey begins here, and I am confident it will be a rewarding one.

Dr. S.M.C.B. Karalliyadda
Head of the Department,
The Department of Agricultural Systems, RUSL



Rajawade Sanshodhan Mandal
Rajawade Sanshodhan Mandal
University of Shiuli

LOCATE ME - FACULTY OF AGRICULTURE, RUSL



BACKGROUND

The Faculty of Agriculture at Rajarata University of Sri Lanka was established in 2001 in Puliyankulama, Anuradhapura, with the primary objective of developing a sustainable agricultural system. Emphasizing the effective utilization of rural farm settings and natural resources, the Faculty focuses its efforts on advancing agricultural practices tailored to the unique challenges of Sri Lanka's Dry Zone. At present, the Faculty of Agriculture is structured into four departments: Agricultural Systems, Plant Sciences, Agricultural Engineering and Soil Sciences, and Animal and Food Sciences. It currently administers an undergraduate programme leading to the BSc. Hons (Agriculture) degree, alongside postgraduate offerings that include the Postgraduate Diploma in Rural Development, Master of Agriculture, Mphil by Research in Agriculture and Doctor of Philosophy in Agriculture.

The Department of Agricultural Systems (DAS) is one of the oldest departments in the Faculty, specializing in Agricultural Economics, Agribusiness Management, Agricultural Extension, Biostatistics, and Agricultural Systems Management. It boasts a diverse curriculum supported by a dynamic faculty team. Currently, the department introduces a new program, the Master of Science in Agroecology, funded and supported by the European Union (EU) through a successful Erasmus grant for CDAE. This initiative is developed in collaboration with nine foreign partner institutes, including seven universities.

The postgraduate degree programme in agroecology represents a strategic initiative that capitalizes on synergies within agroecological ventures and businesses, fostering rapid economic development and poverty reduction in the country. Recent government policies prioritize programmes that stimulate new businesses, thereby boosting the national economy. This programme offers a practical avenue to enhance productivity in agroecological systems while creating livelihood opportunities for rural communities and agro-entrepreneurs. Moreover, it aims to cultivate innovative and dynamic graduates equipped with robust knowledge and essential skills to advance sustainable development in agriculture and food systems. The curriculum adopts a multidisciplinary approach to enrich students' foundational understanding and management proficiency in harnessing natural agroecological resources.

The degree is a comprehensive two-year master's programme comprising 60 credits, including a 15-credit research component and a 2-credit internship. It features core courses designed to meet both local and international educational standards in agroecology. Optional courses are tailored to address country-specific needs and characteristics, ensuring a well-rounded curriculum that includes classroom lectures, laboratory sessions, practical training in cutting-edge methods and technologies, and field visits. The programme's learning objectives are facilitated by experienced experts in relevant disciplines. Upon successful completion, graduates will possess a holistic, interdisciplinary understanding of agroecology and adeptly apply their acquired skills in the field.

Partner Members



**Politécnico
de Coimbra**

Instituto Politécnico de
Coimbra (IPC) | Portugal



Central Luzon State
University Philippines



Hue University Vietnam



University of Peradeniya
(UOP) | Sri Lanka



Rajarata University of Sri Lanka
(RUSL) | Sri Lanka



Vietnam National University of
Agriculture (VNUA) | Vietnam



Mendel University in Brno
(MENDELU) | Czech Republic



Benguet State University
(BSU) | Philippines



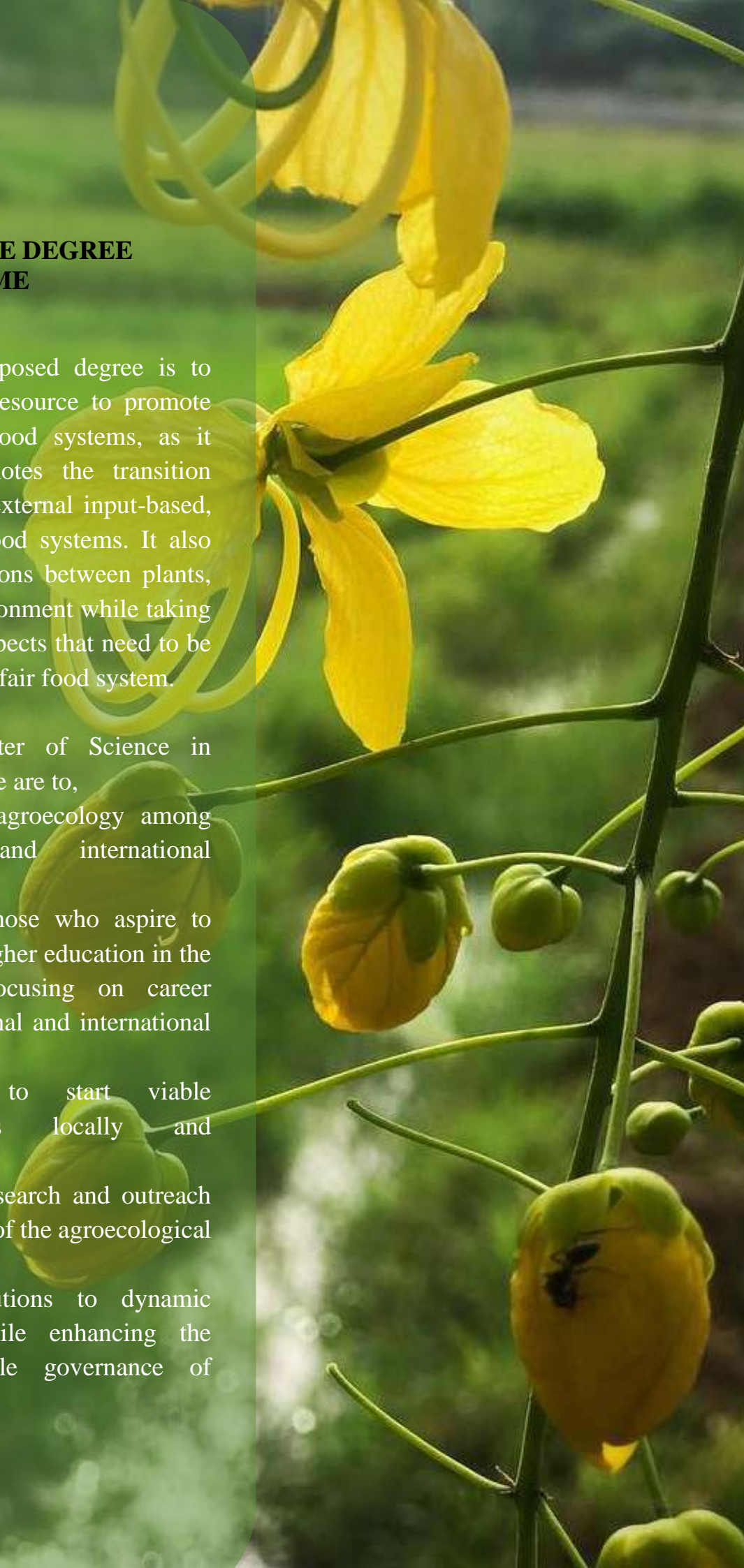
Novel Group S.à.r.l. |
Luxembourg

OBJECTIVES OF THE DEGREE PROGRAMME

The general goal of this proposed degree is to develop the required human resource to promote sustainable agricultural and food systems, as it designs, develops, and promotes the transition towards biodiversity and low external input-based, socially sound farming and food systems. It also seeks to optimize the interactions between plants, animals, humans, and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system.

The objectives of the Master of Science in Agroecology degree programme are to,

1. promote the concept of agroecology among prospective national and international stakeholders.
2. create opportunities for those who aspire to pursue a qualification in higher education in the field of agroecology, focusing on career development in both national and international contexts.
3. develop entrepreneurs to start viable agroecological ventures locally and internationally.
4. produce intellectuals to research and outreach targeting the sustainability of the agroecological systems and ventures.
5. develop appropriate solutions to dynamic environmental issues while enhancing the resilience and responsible governance of agroecological systems.



PROGRAMME LEARNING OUTCOMES

After completion of the degree programme the student will be able to,

1. demonstrate advanced knowledge and understanding of the core aspects of agroecology and their interactions with related disciplines.
2. evaluate and design appropriate agroecological plans and implement interventions appropriately to optimize the agroecological resources.
3. assess current dynamics in agroecology and communicate appropriately to all stakeholders for efficient decision-making.
4. bring appropriate interventions to achieve sustainable outcomes within diverse professional environments related to agroecology.
5. plan, initiate, and manage agroecological ventures sustainably and ethically while appreciating the dynamism in the agroecological environments.
6. build networks with relevant stakeholders to strengthen the group approach to achieving resilience and sustainability in agroecological systems.
7. exercise personal and social responsibility, accountability, and transparency in all dealings related to agroecological systems.
8. create and analyze SMART goals to achieve long-term sustainable outcomes in agroecological engagements.
9. develop a passion for personal and professional development.

ELIGIBILITY REQUIREMENTS FOR THE REGISTRATION

1. A Master Degree (SLQL 9) in Agroecology, Agriculture, Science, Bio-systems, Environmental Science/Management from a Higher Education Institute (HEI) recognized by the University Grant Commission of Sri Lanka (UGC),

or

2. A Postgraduate Diploma (SLQL 8) in Agroecology, Agriculture, Science, Bio-systems, Environmental Science/Management from a HEI recognized by the UGC,

or

3. A Postgraduate Certificate (SLQL 7) in Agroecology, Agriculture, Science, Bio-systems, Environmental Science/Management from HEI recognized by the UGC,

or

4. A Bachelor's Degree (SLQL 5 or 6) in Agroecology, Agriculture, Science, Bio-systems, Environmental Science/Management from a HEI recognized by the UGC,

or

5. Any other equivalent qualifications to above eligibility requirements, acceptable to the Senate, Rajarata University of Sri Lanka upon qualifying examination/ interview and recommendation of the Board of Study, Faculty Board of Faculty of Agriculture, Rajarata University of Sri Lanka.

APPLICATION PROCEDURE

- Application for registration for the Degree Programme shall be called by advertisement in the newspapers and the University website by the Registrar or his/her nominee of the University.
- The application shall be on the prescribed form providing the information as he/she may be required to submit, including his/her qualifications for undertaking the course of study.
- The candidate shall forward the following documents along with the application
 - Certified copies of the educational qualifications
 - Academic transcripts
 - Certified copy of the Birth Certificate
 - Copy of the NIC/ Passport
 - 02 passport size photos
 - Two letters of recommendation of which one should be from an academic referee
 - Copies of any other documents to support the admission requirements

FEE STRUCTURE

Fee Structure	Remarks	Fee	
		LKR	USD
At the Registration			
Application fee		2000.00	25.00
Registration fee	Per year	4000.00	50.00
Library deposit	Refundable	5000.00	75.00
Library fee	Non-refundable	1500.00	20.00
Science fee	Non-refundable	7500.00	100.00
Internet/computer fee	Per semester	3000.00	40.00
Programme fee		200,000.00	2500.00
Examination			
Examination fee	Per credit	800.00	10.00
Comprehensive examination fee	Per attempt	7500.00	100.00
Thesis defense examination fee	Per attempt	12500.00	160.00
Documentation			
Degree transcript	Issued within SL	1000.00	15.00
	Issued within outside SL (Without Postage)	2500.00	40.00
Detailed certificate		500.00	10.00
Makeup examination		3000.00	40.00

HOW TO APPLY?

Applications and scanned supporting documents can be submitted online (recommended) through the faculty website. Hard copies of all application materials should be sent to “*Assistant Registrar, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura*” along with a Bank Deposit slip to the value of Rs. 2000.00 (USD 25.00) written in favour of **Faculty of Agriculture, Rajarata University of Sri Lanka**, Account No. **008-1-001-6-0114574** held at the Peoples’ Bank, Anuradhapura indicating the applicant’s name and the address.

PROGRAMME CONTENT

Course Unit or Module Code	Course Unit or Module Name or Other	Credit Value	Status (Compulsory /Optional)
Year 1 Semester 1			
AS 5101	Agrology	3	Compulsory
AS 5102	Bioclimatology	2	Compulsory
AS 5103	Design and Analysis of Agroecological Experiments	3	Compulsory
AS 5104	Managerial Economics	3	Compulsory
AS 5105	Landscapes Ecology	2	Compulsory
AS 5106	Soil Health and Management	3	Compulsory
AS 5107	Water in Landscape	2	Compulsory
AS 5108	Agroecological Practices	2	Optional
AS 5109	Global Agroecosystems	2	Optional
Year 1 Semester 2			
AS 5201	Ecological Agriculture & Systems Thinking	3	Compulsory
AS 5202	Environmental Aspects of Waste Management	2	Compulsory
AS 5203	Environmental Law	3	Compulsory
AS 5204	Environmental Security and Valuation	3	Compulsory
AS 5205	Human Ecology	3	Compulsory
AS 5206	Landscape and Spatial Planning	3	Compulsory
AS 5207	Precision Agriculture	2	Compulsory
AS 5208	Design and Evaluation of Agroecological Systems	2	Optional
AS 5209	Ecological Entrepreneurship	2	Optional
AS 5210	Research Methods for Agroecology	2	Optional
Year 2			
AS 6101	Internship	2	Compulsory
AS 6201	Thesis – Research Project	15	Compulsory

COURSE CAPSULES

AS 5101 Agrology

Fundamentals of agrology; Evolution of agriculture, Functions and impacts of agriculture; Abiotic and biotic relationships in agriculture; Modern trends in agroecosystem management; Alternative approaches for conventional farming; Pillars of sustainability; Indicators of sustainability, Modelling sustainability; Emergence of an ecological vision; Agriculture, society, and agrology; Administrative regulatory tools of agricultural activities; Sustainable landscape and spatial planning.

AS 5102 Bioclimatology

Weather and climate; The network of meteorological stations and their operation; Earth and its atmosphere; Evaluation and use of solar radiation; Surface energy balance; Temperature of soil and air; Pressure and wind; Climate and biotic interactions; The water cycle and its phases; The formation and types of hydrometeors; Climate change: impacts and adaptation strategies; Extreme weather events and their consequences; Flora and fauna responses to climate and variabilities; Basics of synoptic-scale meteorology; Weather forecasting; Processing of meteorological and climatological data.

AS 5103 Design and Analysis of Agroecological Experiments

Descriptive statistics; Basics of probability; Basics of experiment theory; Basics of mathematical statistics; Tests of hypotheses; Single-factor and multi-factor ANOVA; Non-parametric methods; Regression analysis; Analysis of qualitative data; use of advanced statistical techniques.

AS 5104 Managerial Economics

An introduction to the study of managerial economics; Agri-food industry and market structure; The organization of business, objectives, strategy, and efficiency; Production and costs; Analysis of business and supply risk; Demand in the product market as a factor in business decision-making, demand estimation and prediction; Business organizations and their behaviour in different market structures; Vertical and horizontal growth of business organizations; Pricing in industries with market power; A business organizations in the capital and money markets; The role of the state in a market economy; Business organizations, the environment, and government regulation of externalities; Optimizing the use of non-renewable and renewable natural resources; Assessment of organizational performance.

AS 5105 Landscapes Ecology

The origins of the landscape ecology; Landscape structure: geo-complex, geo-system, evolution, development in the quaternary; Changes in the human-dominated landscapes: Landscape restoration: ecology, habitat restoration, re-naturalization, succession; Landscape disturbance dynamics: connectivity, fragmentation, scattered vegetation, natural and man-made landscapes; Agricultural landscape: spatial and functional structure of agricultural

landscape, Farming for ecosystem functions and services; Sustainable landscape management; Principles of environmental protection; Sustainable development and global environmental platforms; Regulatory tools in environmental protection; Institutional framework and environmental legislations; and renewable natural resources; Assessment of organizational performance.

AS 5106 Soil Health and Management

Soil as a part of agroecological farming systems; Basis of soil formation; Soil sampling and preparation; Soil physical, chemical and biological factors affecting soil health; Soil organic matter; Soil health assessment indicators; Soil classification systems; Soil erosion and compaction; Soil acidity, alkalinity, salinity and sodicity; Soil reclamation; Soil pricing; Preparation of soil health management plan.

AS 5107 Water in Landscape

The importance of water for society, basic legislative documents; Aquatic and water-based ecosystems; Anthropogenic impact on the landscape; Catchment areas -a balanced water regime -the effects of agriculture and forestry management; Functions of catchment area management; Catchment area protection and organization; Sediments in streams and reservoirs; Landscape water-management structures – erosion control and flood control measures in the landscape; Land-improvement facilities in the catchment area – drainage and irrigation structures; Drainage of urbanized areas, rainwater management, green roofs; Check dams, modifications and restorations of streams; Water retention in the landscape, extreme events – floods and droughts; Hydro-technical structures – dams, reservoirs, weirs, hydroelectric power plants, navigation canals.

AS 5108 Agroecological Practices

Basic agro-ecological practices; Agro-ecological practices for nutrient management, weed management, pest and disease control; Agro-ecological practices of agro pastural systems; Agro-ecological production systems; Agro-ecological farming practices for strengthening the resilience of farmers; Designing of ecological agricultural system.

AS 5109 Global Agroecosystems

Dynamics of global change; Population pressure impact on Agriculture, Diminishing trend of soil, resources and land with agriculture; Negative impacts and benefits of agriculture in the globe; Tropical and humid agro-ecosystems; Geographical, political, social and economic dimensions of global agro-ecosystems; Opportunities and challenges for sustainable production in global agro-ecosystems.

AS 5201 Ecological Agriculture & Systems Thinking

Fundamentals of agriculture, concepts and principles; Characteristics of an ecological agricultural system; Regulatory mechanisms in agroecological systems; System approaches and system thinking in ecological agriculture; Ecological aspects of different food production systems, Ecology and sustainability; Design for a sustainable agroecological system.

AS 5202 Environmental Aspects of Waste Management

Waste management concepts: source of waste generation, characterization of waste, impacts of waste on the environment and human health; Parameters important in designing and monitoring of waste treatment systems; Solid waste treatment options; wastewater characteristics, Wastewater treatment, effluent treatment options; Modern trends in waste management; Legal aspects of waste management.

AS 5203 Environmental Law

An introduction to environmental law; A basic overview of legislation, and definition of interdisciplinary contexts – status, development, de referenda law; The framework of public administration bodies in environmental protection, and public law; Liability in environmental law ; Environmental Act; Land protection; Forest protection; Air protection; Protection of plants and animals; Environmental impact assessment, and agricultural, forestry and related structures, activities and equipment; Agricultural law in relation to environmental protection: organic farming, chemical substances in agriculture; Related legislation: area-based protection of nature and the landscape, ecological damage, law on the provision of redress for damage, the Building Act, integrated prevention, waste management, the Mining Act, the Energy Act; Economic instruments in environmental law.

AS 5204 Environmental Security and Valuation

Environmental and agri-environmental security; The concept of environmental security, anthropogenic and natural environmental threats; Ecosystem services: concept, breakdown, context with an emphasis on the agroecosystem, Valuation of Ecosystem Services: valuation techniques; Agriculture as an agent of national and global security, food self-sufficiency and security; Agroecological security aspects; Old ecological burdens, contaminated areas, environmental toxicity, invasive plants, Geological risks and construction activities; Environmental Impact Assessment Techniques; Ecosystem Governance Geological risks and construction activities; Public administration and risk management.

AS 5205 Human Ecology

Human dimension in agroecology; Socio-ecological systems; Food traditions in South Asia; Vulnerability and Resilience in Agroecology; Co-creations and sharing of knowledge. Formal and informal education for enhancing horizontal sharing of knowledge; Empowering marginalized groups in food systems; Youth employment opportunities in agricultural and food systems; Family farming in rural development; Fairtrade for sustainable food systems; Leadership in Agroecology; Participatory decision making in agroecology; Contemporary socio-ecological issues in agroecosystems; Dynamics of social elements in agroecological systems.

AS 5206 Landscape and Spatial Planning

Interpretation of the concept in terms of spatial planning Key concepts of landscape and spatial planning; Evolution of land use systems in Sri Lanka; International context of landscape

planning; The process of spatial planning within the legislative framework of public administration; Spatial planning materials and spatial planning documentation; Landscape planning methods; Spatial planning. Regional Landscape Convention and Zoning; Landscape character assessment – principles and methods; Perception and aesthetics of the landscape and its importance in spatial planning Environmental impact assessments. Nature and landscape conservation.

AS 5207 Precision Agriculture

Introduction to precision agriculture; Principles of Global Navigation Satellite Systems-GNSS, Principles of GIS; Sensor Technologies, Principles of remote and proximal sensing; spectral properties of soil and vegetation: applications of drone and satellite imaging in precision agriculture; Landsat and Copernicus (Sentinel-2) programmes; Concepts and applications of soil spatial variability and basic geo-statistics in precision agriculture, Soil mapping; Precision nutrient management, Plant protection in precision agriculture; Crop yield monitoring; Demonstration of sensor equipment; Decision support system for precision farming; Procedures to introduce precision agriculture in a farming system.

AS 5208 Design and Evaluation of Agroecological Systems

Steps in internal designing of an Agroecosystem; Base analysis and sigmoidal forms; Principles and challenges in the evaluation of agroecosystems; Evaluation objectives, criteria and Links between evaluation criteria and the SDGs; Methodological approaches in structuring evaluation; Diagnostic analysis of agrarian systems; Design and implementation of an appropriate monitoring and evaluation system; Agro-environmental evaluation; Socio-economic evaluation; Evaluation based on transversal criteria; Evaluation of conditions for the development of Agroecology; Characterization of agricultural production systems' degree of agro-ecologisation.

AS 5209 Ecological Entrepreneurship

Sustainable wealth creation; Introduction to evolving consumer preferences; Market dynamics - rising demand for quality, ethical, and ecological concerns, and safety of primary products and services; Evolution of non-conventional enterprises beyond profiting; Concept of ecological entrepreneurship; Process of ecological entrepreneurship; Starting and sustaining profitable ecological enterprises; Public policy for ecological enterprises.

AS 5202 Research Methods for Agroecology

The nature of agroecological research; research designs; planning a research project and formulating research questions; quantitative research in agroecology; quantitative data collection methods; quantitative data analysis; qualitative research in agroecology; qualitative data collection methods; qualitative data analysis; mixed method research in agroecology; ethics in agroecology research.

AS 6101 Internship

Induction to the industrial environment; Massive Open Online Courses (MOOC) on employability; Career mentoring; Employability; Self-reflection using SEAL process (Situation, Effect, Action, Learning): Gap & SWOT analysis.

AS 6201 Thesis – Research Project

As a compulsory requirement of the degree programme, students are required to obtain 15 credits from the research project (AS 6201) during which they will be guided by a supervisor appointed by the University Senate on the recommendation of the Board of Study. Range of research topics is available within the research interest of teaching panel that student can select.

PANEL OF TEACHERS

Internal Resource Persons

Name	Position
Prof. (Mrs) G.A.S.Ginigaddara	Professor
Prof. G.V.T.V. Weerasooriya	Professor
Prof. N.S. Abeysinghe	Professor
Prof. M.G.T.S. Amarasekara	Professor
Prof. (Mrs.) M.K.N. Kumari	Professor
Dr. S.M.C.B.Karalliyadda	Senior Lecturer
Dr. A.M.K.R.Bandara	Senior Lecturer
Dr. D.M.S. Duminda	Senior Lecturer
Dr. W.C.P. Egodawatta	Senior Lecturer
Dr. Nalaka Geekiyanage	Senior Lecturer
Mr. N.M.K.C. Premarathne	Senior Lecturer
Mr. E.J. Kosgollegedara	Senior Lecturer
Mr. R.A.A.S. Rathnayaka	Lecturer
Ms. A.N. Kodituwakku	Lecturer

GOVERNING BY-LAWS: THE ESSENTIALS

Registration

On acceptance by the Board of the Study, Faculty Board and the Senate of the University, a person shall be registered as a postgraduate student of the University upon payment of prescribed fees.

Registration Validity

The period of registration shall be commenced from the date of registration. Any registration shall be for one semester.

Renewal of Registration

The registration for the Master of Science in Agroecology Degree Programme shall be deemed to have lapsed at the expiry of its period of validity. A candidate whose registration has so lapsed may renew his/her registration for a further period, provided that he/she is considered eligible for such re-registration by the Faculty Board and the University Senate.

Cancellation of Registration

The University shall have the right to cancel the registration of a candidate at any time, notwithstanding anything stated contrary to above.

Suspension of the Programme

In the opinion of the Board of Study/Faculty Board/Senate of the University, if the number of candidates who have applied and/or who are registered for the Degree Programme in any given year is not sufficient/financially viable, the Board of Study/Faculty Board/Senate of the University reserves the right not to commence the Degree Programme. University may refund any fees paid by the candidates.

Refund Policy

The total programme fee is not refundable in any case. If a candidate fails to follow the programme after registration, the money paid may be refunded retaining 10% of the programme fee and any related service charges, after approvals from the Board of Study, Faculty Board and Finance Committee.

Absences from Classes and Examinations

- i. No candidate shall be absent or withdraw from the examination or any other assessment without the prior approval of the Board of Study.
- ii. Excuses for the absence will be granted only if the absence is due to serious ill health, or death of a member of the immediate family or any other cause acceptable to the

Board of Study and approved by the Senate. Even though an excuse is granted to a student, he/she can sit the examination only on the current occasion or next immediate occasion as a proper candidate.

- iii. If a student fails to attend academic activities or examinations due to a medical reason, such absence should be reported to the Academic Coordinator by a valid medical certificate within 14 days from absence. All medical certificates should necessarily be obtained from one of the following medical officers.
 - a. University Medical Officer (UMO)
 - b. District Medical Officer (DMO)
 - c. Consultant Specialist in the relevant field
 - d. Head of a Government Base Hospital
 - e. Medical Superintendent of a Provincial Ayurvedic Government Hospital
 - f. Medical Officer registered in Sri Lanka Medical Council
 - g. Ayurvedic Physician registered in the Ayurvedic Medical Council
- iv. Board of Study will accept medical certificates certified by the University Medical Officer.
- v. Under exceptional circumstances, medical certificates issued by private hospitals or registered private practitioners could be considered by the University Medical Officer.
- vi. Students who fall ill during an examination session should immediately report to the Board of Study through the Supervisor of the examination.
- vii. If a candidate falls ill during the period of examination, she/he should obtain a medical certificate and should be sent to the Programme Director within 14 days.
- viii. The above candidates are allowed to sit for the repeat examination as proper candidates and they are expected to pay the examination fee in such an attempt.
- ix. The absence of a candidate from an examination in the event of a death of an immediate family member will be excused if approval is obtained from the Board of Study and the Senate by submission of the death certificate and appropriate proof of relationship. In that event, the student will receive a symbol of “DFR” (Deferred) for that course.

Course Module

The Master of Science in Agroecology degree Programme shall include course units as prescribed in the student handbook.

Adding and Dropping Courses

- Adding and dropping of the courses are allowed within two weeks of the commencement of the academic semester.

- Any request to add/drop courses beyond the add/drop deadline must be submitted before the End-term examination of the relevant course with an acceptable reason and permission must be obtained from the relevant Course Coordinator, Academic Coordinator and Programme Director.

Minimum Number of Students for a Course Unit

The minimum number of students required for the commencement of a particular course in a semester shall be four (04). Courses where the minimum number is not satisfied, shall not be offered in the particular semester. However, the final decision will be taken by the Board of Study.

Medium of Instruction and Examinations

The medium of instruction, examinations and thesis writing of the Degree Programme in English.

Examination Regulations

Regulations related to examinations in the Rajarata University of Sri Lanka are applicable for the Degree Programme. The decision of the Senate on any examination matter shall be the final.

Evaluation Criteria

- i. The evaluation shall be throughout and at the end of each semester.
- ii. Course units shall be evaluated based on continuous assessments as well (quizzes, reports, assignments, presentations, case studies, etc.), and end-semester examinations.
- iii. The contribution of each course unit from the end-semester examination to the final grade shall be 40-60% while the rest is covered by the continuous assessments.
- iv. The end-semester examination shall consist of a question paper for each course module with a maximum duration of three hours for which all candidates should appear.
- v. The two (02)-credit internship shall be evaluated based on an internship e-portfolio and a final presentation.
- vi. The research component shall be evaluated based on the thesis, the thesis defence examination.
- vii. A student must obtain a minimum of “C” grade to pass a course unit and the Internship
- viii. A student must obtain a Satisfactory “S” level to pass the Comprehensive Examination and the Thesis at the Thesis Defense examination.

Eligibility for End-Semester Examination

- i. A candidate shall not be permitted to sit for end of course examination unless
 - a. he/she has been duly registered as a postgraduate student from the commencement of the academic year/semester in which that examination is held.
 - b. he/she has submitted a duly filled examination application on time.
 - c. he/she shall bind by all rules relating to the Examination Procedure, Offenses, and Punishment of the University.
 - d. he/she has attended at least eighty per cent (80%) of the classes held.
 - e. he/she has paid examination fees and all dues of the program
- ii. The Academic coordinator has certified that he/she has completed the course of studies leading to the Master of Science in Agroecology by attending the required number of lecture hours, tutorial classes and other forms of instructions in the subject matter of each course.
- iii. If a candidate fails to maintain 80% of attendance in any subject, he/she has to repeat it at the repeat exam.
- iv. If any candidate does not fulfil requirements in terms of marks for continuous assessment and final examination, he/she shall complete an additional assessment to make up for the deficiency, with the recommendation of the Board of Study.
- v. All rules relating to the Examination Procedure, Offenses, and Punishment of the Rajarata University of Sri Lanka apply to the Master degree examination.

Comprehensive Examination

- i. The Board of Study shall appoint a five-member examination panel whom three shall be internal examiners from within the panel of teachers and two external examiners from outside appointed by the Board of Study for the comprehensive oral examination on receipt of the application by an eligible candidate.
- ii. The Board of Study shall nominate a member of the examination committee as the Chairperson.
- iii. To be eligible to sit for the comprehensive examination, a candidate should pay all remaining dues.
- iv. If a candidate fails to sit for the comprehensive examination on the date set by the Board of Study without providing any valid reason, it shall be considered as the first attempt. In such cases, a rescheduling fee and the comprehensive examination fee should be paid.

- v. If a candidate fails to sit for the comprehensive examination within the semester following the release of final GPA, all dues of the semester registrations, as prescribed in the current year student handbook, up to the date of application for the comprehensive examination should be paid.
- vi. For a student to be eligible to sit for a Comprehensive Examination he/she shall be required to satisfactorily complete the course component of the Degree Programme.
- vii. A candidate shall have a maximum of three attempts to obtain a satisfactory grade at the comprehensive examination.
- viii. If a candidate has not obtained a satisfactory grade (S) at the third attempt of the comprehensive examination, the Board of Study reserves the right to recommend that the candidate be awarded a Postgraduate Diploma in Agroecology.

Award of Degree

To be eligible to be awarded the Master of Science in Agroecology, the student

- a. must have successfully completed the required credits.
- b. must have obtained a minimum Grade Point Average of 2.50. (with a maximum of two D passes).
- c. should have obtained a satisfactory grade (S) in the comprehensive examination and the thesis defence examination.
- d. completed the relevant requirements within a period as prescribed in section 02 of the governing by-laws.
- e. paid registration fees from the date of first registration to the date of the final thesis submission to qualify for the award of the degree.
- f. Submitted a full paper in a refereed journal.
- g. should have paid in full all remaining dues.

Repeat Candidate

A student who does not satisfy the conditions for a pass (minimum D grade), failed to submit a proper medical certificate in his/her absence to the examination, or is not eligible for the examination shall be referred to as a repeat candidate.

Repeat Examinations

- i. No repeat examinations would be arranged for the repeat students except for repeat comprehensive and thesis defense examinations. Repeat candidates must sit for the examination of relevant course units at the next available opportunity. Only two occasions shall be allowed to re-sit for an examination.
- ii. There will be additional fees charged from repeat candidates and candidates who request repeat comprehensive examinations and reexamination of thesis defense as determined by the University Senate, depending on the expenses be incurred by the University to serve their repeat attempts in the examination process.

- iii. The highest grade obtainable in repeat examinations of course units will be limited to a “B” grade.
- iv. The grace attempt will be allowed subject to the approval of the Board of Study and the University Senate after the lapse of all three attempts.
- v. If the student fails to obtain a higher grade at the repeat examination the originally obtained grade will be retained. The highest grade obtained for the given course during the prescribed period is considered for the calculation of the Grade Point Average.
- vi. Repeat candidates shall make all payments as prescribed by the University Senate on the recommendation of the Board of Study and Faculty Board.

Late Examination Application Fee

An additional fee of 50% of the prescribed fee shall be charged, if the application is received within seven days of the due date for the receipt of applications and an additional fee of 100% of the prescribed fee shall be charged if the application is made after seven days, but within fourteen days of the due date. No applications shall be entertained under any circumstances after the lapse of fourteen days from the due date.

Postponement of the Academic Year

- i. If a candidate registered for the course applies for a postponement of the academic year, he/she may be allowed to follow the next immediate offer after the recommendation of the Board of Study and the Faculty Board and approved by the University Senate. Such a candidate should complete the degree within stipulated time as prescribed in section No 02 of the governing By-laws. The application fee and the course fee paid are transferable only if the candidate has not attended a single lecture. Such candidates are required to pay the registration fee for the new academic year. However, if the course fee of the next offer has been increased, he/she has to pay the balance of the course fee to get registered.
- ii. If a candidate applies for a postponement after attending lectures, he/she is not allowed to postpone the academic year. However, the final decision on such a candidate will be taken by the Board of Study.
- iii. The request for postponement should be made to the Programme Director within a month after the registration.
- iv. The selected candidates are not allowed to transfer their registration to any other candidate.

Notification of Results

- i. The University shall display on the notice board/Learning Management System/Management Information System, the results of the candidates who have appeared for the examination of the Master’s degree.

- ii. The results of each semester will be reported to the candidates at the end of each semester with the grade earned by the candidate for each course as indicated in the grading scale. The results sheet will be issued based on the request made by the candidate following the release of results of each semester by the Examination Branch of the University after confirmation of the University Senate.

Re-scrutinization of Examination Results

If a candidate wishes, she/he shall request to verify examination marks and grades, particularly for end semester examinations. Re-scrutinization of marks and grades shall be limited only during the 2 weeks immediately following the release of results of an examination. As the cost of the re-scrutinization process must be borne by the candidate, a non-refundable fee, calculated based on the actual cost of the re-scrutiny process shall be levied on the candidate.

Grading System

The following scheme shall be used to compute the Grade Point Average (GPA)

Marks	Grade	GPV
85 or above	A+	4.0
80 – 84	A	4.0
75 – 79	A-	3.7
70 – 74	B+	3.3
65 – 69	B	3.0
60 – 64	B-	2.7
55 – 59	C+	2.3
50 – 54	C	2.0
45 – 49	C-	1.7
40 – 44	D	1.3
<40	F	0.0

Overall Grade Point Average (GPA) is calculated using the formula given below. Grade Point Average (GPA) is the weighted arithmetic mean of the grade point values. i.e. the GPA is determined by dividing the total **Grade Point Value (GPV)** by the total number of credits.

$$\text{i.e.} = \frac{\sum C_i G_i}{\sum C_i}$$

$$\sum C_i$$

Where C_i is the number of credits for the i^{th} course, and

G_i is the grade point value obtained for the i^{th} course

Candidates who get a lower grade than D for a course should repeat that course at the next immediate opportunity and he/she shall be given a maximum of B grade even if the student may obtain more than 69 marks. If a student has obtained a C⁻ or D grade for a course, he/she has the option either to repeat the course or to keep the grade as it is, if he/she can maintain the overall minimum GPA requirement of 2.5. However, a student shall keep a maximum of two D grades during the Programme and shall retake all the other subjects for which they obtain D or lower grades.

If a student fails to complete the requirements of a registered course due to illness or some other valid reason supported by evidence acceptable to the Board of Study, he/she shall obtain an “I” (Incomplete) grade for that course. Such a student shall complete the requirements for that particular course on the immediate occasion the course is next offered. In this instance, unlike the case of a repeat examination, on successful completion of the course, he/she will be given the actual grade obtained for that course.

Effective Date of the Degree

- i. The effective date of the Master of Science in Agroecology Degree shall be the date on which the candidate passes the thesis defense examination provided that the corrected hardbound thesis is submitted to the examination branch within 30 days of the thesis defense examination.
- ii. If a candidate fails to submit the final bound copy of the thesis within the stipulated time, the effective date shall be the date on which he/she submits the final bound copy of the thesis.
- iii. If a candidate has to rewrite/resubmit the thesis, the examiners reserve the right to decide, at the thesis defense examination, if the candidate has to face another thesis defense examination after resubmitting the thesis. A student shall pay registration fees from the date of first registration up to the date the final bound thesis is submitted to qualify for the award of the degree.

Result Sheets / Transcripts

The fees payable for a certificate or statement of results or transcript shall be determined by the Board of Study.

Early Exit Option

If a Master of Science in Agroecology candidate requires an early exit having

- a. completion of a minimum of 30 credits of coursework with a minimum 2.5 FGPA in the program with satisfactory performance in the comprehensive examination without the research component and the internship can obtain Master of

Agroecology (SLQL9). In such cases, the effective date will be the date that the candidate completes the comprehensive examination.

- b. completion of a minimum of 25 credits of coursework with a minimum 2.5 FGPA in the program without the comprehensive examination, research component and internship can obtain Postgraduate Diploma in Agroecology (SLQL8). In such cases, the effective date will be the date that results are released for the course which completes 25 credits.
- c. completion of a minimum of 20 credits of coursework with a minimum 2.5 FGPA in the program without the comprehensive examination and research component and internship can obtain Postgraduate Certificate in Agroecology (SLQL7). In such cases, the effective date will be the date that the candidate sit for the final examination for the course which completes 20 credits.

Fall Back Option

- A Master of Science in Agroecology candidate whose thesis is evaluated as unsatisfactory as Section No 50 can subsequently request a Master of Agroecology equivalent to SLQL 9. The effective date of the Master of Agroecology shall be the date of his/her completion of the comprehensive examination.
- A Master of Science in Agroecology candidate who failed at three attempts of the Comprehensive Examination can subsequently request a Postgraduate Diploma. The effective date of the Postgraduate Diploma shall be the date of the third comprehensive examination.
- A Master of Science in Agroecology candidate who failed to complete the degree programme but completed 20 credits with a minimum of 2.5 FGPA is eligible to request a Postgraduate Certificate. The effective date of the Postgraduate Certificate shall be the date of the request made by the candidate with the completion of the required credits of the coursework.

