

Letterkenny Institute of Technology Report of the Panel of Assessors

PART 1 GENERAL INFORMATION

SCHOOL/DEPARTMENT: Science

DATE OF VISITATION: 19th June 2017

PROGRAMMES EVALUATED:

Bachelor of Science (Honours) in Agriculture (common entry) incorporating degree award options: Animal and Crop Science /Environmental Science (240ECTS)

MEMBERS OF PANEL OF ASSESSORS:

Dr David Ryan, Assistant Registrar, IT Carlow

Ciaran Kerins, Teagasc Education Officer

Marion Coy, Mountbellew Agricultural College Ltd;

Eoin McCarthy, Lecturer, IT Tralee

Tim Keady, Teagasc, Principal Research Officer

Secretary to Panel: Simon Stephens

INSTITUTE STAFF:

Dr. Joanne Gallagher, Head of Department
Aidan Finnan
Ms. Cathy Hannigan
Cormac Murphy
Dr. Kim McFadden
Dr. Catherine Lynch
Dr. Denis McCrudden
Gerard McDaid
Liam McKinney
Dr. John Slater
Dr. Anne Nelson

Dr. Gertie Taggart, Head of School

PART 2 FINDINGS OF ASSESSORS

The Panel of Assessors are satisfied that the proposal adequately addresses the following criteria:

(1) Education and Training Requirements

The provision of third level opportunities in agriculture in the region has been targeted as a growth area for the Institute. The programmes are consistent with the Institute's mission and strategy, avoid redundant provision and make efficient use of resources. The focus on the first year experience, civic engagement and work based learning evident in the programmes and further outlined during the panel visit are to be commended.

(2) Unity

The underlying unifying theme was detailed during discussions and evidence was provided to indicate that the modules are bonded by interactions which are either implicit or explicit. The programme team and school, and department management demonstrated how the standard of knowledge, skill and competence in science, determined by QQI evolves throughout the programme as a whole and these thematics will be tabulated and documented for clarity as recommended by the panel.

(3) Teaching and Learning

The proposed approach to teaching and learning is outlined in the document and was more clearly detailed and justified during the panel visit.

(4) Learner Assessment

The learner assessment methods are consistent with QQI's policy on fair and consistent assessment. The assessment methods are capable of demonstrating attainment of the standards of knowledge, skill or competence, determined by QQI, for the related award and will be more clearly detailed by the programme team in the support documentation and module syllabi. The preparation and dissemination of an assessment schedule at the start of each semester is noted as good practice.

(5) Resources

The proposed staffing levels are appropriate and the levels of qualifications and competence of both existing and proposed staff is sufficient to deliver the programme. The necessary facilities available in terms of accommodation, equipment, and library and information technology resources are satisfactory to support the proposed programme. The maths and communication learning support resources detailed in the submission are particularly impressive

(6) Quality Assurance

The proposal demonstrates how the Institute's quality assurance procedures have been applied in the development of the proposed programme and satisfactory procedures exist for the on-going monitoring and periodic review of programmes.

(7) Programme Title and Award Title

The BSc in Agriculture (Hons) Animal and Crop Science award title is consistent with the named awards determined by QQI, is clear, accurate, succinct and fit for the purpose of informing prospective learners and other stakeholders. The BSc in Agriculture (Hons) in Environmental Science will be reconsidered as discussed with the panel.

(8) QQI Standards

The learning outcomes of the programme were outlined in such a way that the compliance with the appropriate QQI standard was demonstrated. This will be supported and clarified in the documentation by additional detail to highlight the development of Core Science/Animal/Crop/Environmental elements throughout the 4 years of each degree

(9) Access Transfer and Progression

This programme incorporates the procedures for access transfer and progression that have been established by the NQAI and is consistent with QQI policy in accommodating a variety of access and entry requirements. Of particular note are links to Teagasc and FE programmes as well as the availability of RPL routes for applicants.

PART 3 RECOMMENDATIONS

(For the attention of the Academic Council)

The Panel of Assessors advises the Academic Council that the Institute and the School/Department should take cognisance of following recommendations:

- 1. The title of the BSc in Agriculture (Hons) in Environmental Science should be reconsidered for example, BSc in Agriculture (Hons) in Environmental Management may be more appropriate. Alternatively the programme should be revised to focus on Environmental science and be re-submitted.
- 2. The department of science should consider a phased approach introducing the BSc in Agriculture (Hons) Animal and Crop Science in September 2017 and an appropriately titled or a revised BSc in Agriculture (Hons) in Environmental Science at a later date.
- 3. Prepare and provide a table tracking the development (and credits) of Core Science/Animal/Crop/Environmental elements throughout the 4 years of each degree to inform both learners and staff. This table should emphasise where the Crop Science skills are developed in advance of the Crop production module(s).
- 4. Develop a Professional Development (capstone) module in Year 4 (possibly replacing part of the 25 credits currently assigned to research over years 3 and 4 which is excessive)
- 5. The syllabi as documented are not sufficiently comprehensive and need to be revised to better reflect the content of the modules. This will not require large volumes of additional text but some key areas currently being taught, and elements such as farm visits, are not included in the document.
- **6.** All relevant syllabi should make specific reference to agricultural technological developments, the EU and to the Environment.
- 7. The development of practical skills is a major part of the programmes and the practical elements of modules needs to be described and linked to both the relevant learning outcomes and practical assessment strategy in both the module template and in support text.

8. Assessment:

- a. Review the weighting of CA/Exam particularly in the later years. While a 50:50 breakdown between practical/CA and summative assessment is suitable in years 1 and 2, 40:60 in year three and 70:30 in year four should be considered.
- b. In the syllabi the table mapping LOs to Assessment Strategy currently suggests that all LOs are being assessed by all examination elements and should be amended.
- c. For modules which have a practical element and an associated 'failed element', the failed element mark of 25% should be revised.
- d. While monitoring attendance as a measure of learner engagement is understandable, linking this to assessment should be reconsidered
- **9.** The work placement is a key element of these programmes. Describe the conditions under which work placement occurs; the selection of placements; the management and supervisory arrangements; the assessment; and the responsibilities of the placement partners.
- 10. Academic staff the Institute should target both the research seed funding and external funding sources to help to build research capacity in the area which will inform and support the undergraduate programmes
- 11. The department of science should target the development of International partnerships, collaborations and student and staff mobility in Agriculture

Response from the Department to the Recommendations

- The title of the award has been considered in line with the recommendations
 of the panel and the suggested amendment of the panel has been adopted.
 The title of the award is as follows:
 Bachelor of Science (Honours) in Agriculture Common Entry with Degree
 Award options in: Animal and Crop Science or Environmental Management.
- A phased approach is currently planned. The Bachelor of Science (Honours)
 in Agriculture in Animal and Crop Science will be introduced in 2017, and the
 Bachelor of Science (Honours) in Agriculture in Environmental Management
 will be introduced in 2018.
- 3. The principle module themes under the headings of Animal and Crop Science and Environmental Science have been outlined in Section 4, pages 40 -42 of the programme document. However, in line with the recommendations of the panel documentation providing further clarification have been provided in Appendix A.
- 4. The programme team will consider this.
- 5. All programme documentation across the Institute are written using a standard format. This has been the practice for a number of years and The Department of Science has prepared and validated all programme documentation in line with this format since 2011. These programmes include Higher Certificate in Science, Bachelor of Science and Bachelor of Science

Honours. All documents in the Department and indeed the institute adhere to this format. All programmes in the Department have been revalidated through the Programmatic Review process in the current format in May of 2017. As with all other programmes in the Institute the documentation was reviewed by the programmes committee of Academic Council and it was the recommendation of the programmes committee to Academic council that the programme go forward to panel. The Documentation provided to the panel was in line with, and followed all the Institutes procedures any substantial change to the documentation templates must be considered and approved by Academic Council However, given the comments of the panel the Department will bring the concerns of the panel to Academic Council who may choose to review the documentation format.

- 6. In response to the panel reference to farm visits, Relevant Legislation and Technology has been included in module templates as appropriate.
 - The delivery of module content shall be supported by farm visits where appropriate
 - All indicative content shall be delivered in the context of pertinent National legislation.
 - Advances in applicable technology shall be discussed throughout the module.
- 7. The Department of Science are in complete agreement that the delivery of practical skills is an important part of the award and as such delivery of practical skills is an integral part of this and all other programmes in the Department. The Department acknowledges the panel's view that this is not as clearly discernible within the documentation as it could be however, as outlined above this is in line with current documentation practices in the Institute and any substantial change to the documentation templates will have to be considered and approved by Academic Council. The Department will bring the concerns of the panel to Academic Council who may choose to review the documentation format. However, given the comments of the panel the Department have provided additional information on the practical content of the programme in Appendix B.
- 8. a) The examination weighting in year four of the programme have been reviewed and has been revised to 60% Final Exam and 40% CA in cases where a CA element involves practicals. In accordance with our special regulations the failed element policy can only be implemented with components of 40% or above. Therefore, if the CA component weighting was moved to 30% the current failed element regulation could not be implemented.
 - b) The Department recognises that the current template does not best suit the requirement of programmes that have significant content which include both a practical and a written elements. The Department supports the amendment of this template in the future however this will involve changes to the documentation templates will have to be considered and approved by Academic Council. The Department will bring the concerns of the panel to Academic Council who may choose to review the documentation format.

- c) The Department of Science acknowledges that the failed element of 25% is particularly low in a national context however, we are the only Department to implement such a policy in LYIT. The failed element will be considered at Departmental level in the next academic year with a view to increasing this.
- d) In the case of practical classes attendance at 90% of practical classes is required. This reinforces the emphasis that the Department places on practical skills. Repeat practical's are not facilitated in the Department Attendance is not linked to assessment. This is normal practice within the Department.
- 9. This information is available in support documentation which is attached $\mbox{Appendix} \ \mbox{C}$
- 10. The Department supports this recommendation and wishes to develop research capacity in this area over time.
- 11. The Department supports this recommendation and wishes to develop capacity in these areas over time.

The Panel of Assessors advises the Academic Council that approval of the programmes subject to general conditions of approval together with the following additional condition:

There were no conditions attached to the approval of these programmes

PART 4 PROPOSED PROGRAMME SCHEDULE(S) Attached below

Title Of Award:

Bachelor of Science Honours in Agriculture (with degree award options)

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

1

Date Effective:

September, 2017

Semester:

1

Semester	Title of examination	ct status	Subject status credits credits				t hours week)			Alloca	ation of	marks	
Ser	subject	Subje	Level	Number	L/T	Ь	IL	Total	CA	Project	Practical	Final	Мах
1	Introduction to Agriculture	М	6	5	2	2	4	8	50			50	100
1	Animal Husbandry, Nutrition and Welfare.	М	6	10	4	3	10	17	50	-	-	50	100
1	Communications and IT Skills	М	6	5	2	1	5	8	100				100
1	Fundamentals of Biology and Chemistry	М	6	5	3	2	3	8	50	-	-	50	100
1	Mathematical Skills for Science	М	6	5	3	1	4	8	50	-	-	50	100

Total ACCS credits required for semester:

30

Pass Mark in all Modules is 40%.

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practical's for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question

Title Of Award:

Bachelor of Science Honours in Agriculture (with degree

award options)

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

1

Date Effective:

September, 2017

Semester:

2

Semester	Title of examination	Subject status		CCS dits		Contact (per w			8	Alloca	tion o	f marks	
Sem	subject	Subjec	Level	Number	L/T	P	IL	Total	CA	Project	Practical	Final	Max
2	Ruminant Husbandry	М	6	10	4	3	10	17	50	-	-	50	100
2	Agricultural Business Management	М	6	10	5	0	12	17	50	-	-	50	100
2	Soil and Plant Science	М	6	5	3	2	3	8	50	-	-	50	100
2	Alternative Farm Enterprises	М	6	5	3	2	3	8	50	-	T	50	100

Total ACCS credits required for semester:

30

Pass Mark in all Modules is 40%.

- Students are expected to attend all timetabled classes.
- Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question

Title Of Award:

Bachelor of Science Honours in Agriculture (with degree

award options)

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

2

Date Effective:

September, 2017

Semester:

3

Semester	Title of examination	Subject status	ACCS credits				tact hou er week)			Alloca	tion o	f mark	(S
Sen	subject	Subjec	Level	Number	L/T	Ь	IL	Total	CA	Project	Practical	Final	Max
3	Agriculture and Environmental Impact	М	6	10	5	2	10	17	50	-	-	50	100
3	Grassland and Crop Production	М	6	10	4	3	10	17	50	-	-	50	100
3	Work placement and Farm Health and Safety	М	6	5	2	1	5	8	100	-	,		100
3	Beef and Dairy Production Systems	М	7	5	3	2	3	8	50	-	-	50	100

Total ACCS credits required for semester: Pass Mark in all Modules is 40%.

Special Regulations:

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.

30

3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

Title Of Award: Bachelor of Science Honours in Agriculture (with degree

award options)

Area Of Specialisation: Agriculture

Learning Mode Offered: Full-time, ACCS

Stage: 2

Date Effective: September, 2017

Semester:

ıester	Title of examination subject	Subject status	ĺ .	CCS dits		Contac (per	t hours week)	1	Al	locat	ion o	f mar	·ks
Sen	subject	Subjec	Level	Number	Γ/Γ	P	IL	Total	CA	Project	Practical	Final	Max
4	Work Placement	М	6	30	-	-	15	35	100	-	-		P/F

Total ACCS credits required for semester: 30 Special Regulations:

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.
- 4. 100% attendance is required for work placement. If a student's absence from placement is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.

Title Of Award: Bachelor of Science Honours in Agriculture (with degree

award options)

Area Of Specialisation: Agriculture

Learning Mode Offered: Full-time, ACCS

Stage:

Date Effective: September, 2017

Semester: 5

nester	Title of examination subject	Subject status	1	CCS dits			ct hours week)	6	Al	locat	ion o	of mar	·ks
Sen	subject	Subjec	Level	Number	L/T	Ъ	IL	Total	CA	Project	Practical	Final	Max
5	Animal Science	М	7	10	4	1	12	17	50	-	-	50	100
5	Agricultural Marketing and Accounts	М	7	5	3	0	5	8	50	-	-	50	100
5	Advanced Soil Science	М	7	5	3	2	3	8	50			50	100
5	Sheep, Pigs and Poultry Production	М	7	5	3	2	3	8	50	-	-	50	100
5	Research skills	М	7	5	1	2	5	8	100				100

Total ACCS credits required for semester: 30 Pass Mark in all Modules is 40%.

Special Regulations:

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

100% in common with 3rd Bioscience, Bioanalytical Science Food Science and Nutrition, Pharmaceutical and Medicinal Science, BSc Honours in Science



Title Of Award:

Bachelor of Science Honours in Agriculture (with degree award options)

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

Date Effective:

September, 2017

Semester:

Semester	Title of examination			CCS dits			ct hours week)		A	Alloca	tion o	f mark	ss
Se	subject	Subject status	Level	Number	L/T	Ъ	1.L	Total	CA	Project	Practical	Final	Max
6	Agriculture and Food Technology	М	7	5	4	-	4	8	50	-	-	50	100
6	Farm Waste and Environmental Science	М	7	10	5	2	10	17	50	-	-	50	100
6	Advanced Crop Production	М	7	5	3	-	5	8	50	-	-	50	100
6	Literature Project	М	7	10	1	2	14	17	100	-	-		100

Total ACCS credits required for semester: Pass Mark in all Modules is 40%.

30

- 1. Students are expected to attend all timetabled classes.
- Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy 2. the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

Prooposed Course Schedule

Title Of Award:

Bachelor of Science Honours in Agriculture in Animal and Crop Science

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

4

Date Effective:

September, 2017

Semester:

7

Semester	Title of examination	Subject status		CCS edits			ct hours week)		F	Alloca	tion o	f mark	SS
Š	subject	Subj	Level	Number	T/T	Ь	IL	Total	CA	Project	Practical	Final	Max
7	Agricultural Business and Economics	M	8	10	4	-	13	17	30	-	-	70	100
7	Animal Welfare	М	8	10	5	2	10	17	40	-	-	60	100
7	Crop Science and Mechanisation	М	8	5	3	-	5	8	30	-	-	70	100
7	Research Project Design	М	8	5	1	2	5	8	100	-	-		100

Total ACCS credits required for semester:

30

Pass Mark in all Modules is 40%.

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

Proposed Course Schedule

Title Of Award:

Bachelor of Science Honours in Agriculture in Animal and Crop Science

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

4

Date Effective:

September, 2017

Semester:

8

mester	Title of examination subject		ACCS credits				ct hours week)		F	Alloca	tion o	f mark	s
Se	subject	Subject status	Level	Number	L/T	P	II	Total	CA	Project	Practical	Final	Max
8	Sustainable Agriculture	М	8	10	4	-	4	8	30	-	-	70	100
8	Animal Health and Reproduction/Ge netics	М	8	10	4	3	10	17	40	-	-	60	100
8	Research Project	М	8	10	2		15	17	100	-	-		100

Total ACCS credits required for semester:

30

Pass Mark in all Modules is 40%.

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- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

Proposed Course Schedule

Title Of Award: Bachelor of Science Honours in Agriculture in Environmental

Management

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

1

Date Effective:

September, 2017

Semester:

7

Semester	Title of examination			CCS edits			ct hours week)		A	Alloca	tion o	f mark	s
Se	subject	Subject status	Level	Number	L/T	P	IL	Total	CA	Project	Practical	Final	Max
7	Agricultural Business and Economics	M	8	10	4	-	13	17	30	-	-	70	100
7	Environmental Science	М	8	10	4	3	10	17	40	-	-	60	100
7	Organic farming	M	8	5	3	-	5	8	30	-	-	70	100
7	Research Project Design	М	8	5	1	2	5	8	100	-	-		100

Total ACCS credits required for semester:

30

Pass Mark in all Modules is 40%.

Special Regulations:

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

Note: It is Institute policy to publish the final reports of the Panel of Assessors

Proposed Course Schedule

Title Of Award:

Bachelor of Science Honours in Agriculture in Environmental

Management

Area Of Specialisation:

Agriculture

Learning Mode Offered:

Full-time, ACCS

Stage:

4

Date Effective:

September, 2017

Semester:

8

mester	Title of examination	Subject status		CCS edits			et hours week)		A	Alloca	tion o	f mark	S
Se	subject	Subj	Level	Number	L/T	Ь	II	Total	CA	Project	Practical	Final	Max
8	Sustainable Agriculture	М	8	10	4	-	4	8	30	-	-	70	100
8	Climate change and Agriculture	М	8	10	5	2	10	17	40	-	-	60	100
8	Research Project	М	8	10	3	-	14	17	100	-	-		100

Total ACCS credits required for semester:

30

Pass Mark in all Modules is 40%.

- Students are expected to attend all timetabled classes.
- 2. Students must attend 70% of timetabled classes and 90% of practicals for all modules. Students who fail to satisfy the attendance requirements will be referred to the Head of Department. If their absence is deemed to compromise satisfactory completion of the module they may be required to repeat part or all, of the module.
- 3. In order to progress to the next stage students must achieve greater than 25% of the marks available in a module element, which in turns accounts for 40% or more of the overall module marks. If unsuccessful, the student must repeat the module element in question.

Programme Evaluation Report Approved by:

Dr David Ryan

Chairman to Panel

(Assistant Registrar, IT Carlow)

Date 17 Jan Joi8

Billy Bennett

(Registrar, Letterkenny IT)

Date 17 January 2018.