NEW TAUGHT PROGRAMME EVALUATION PANEL REPORT



1. GENERAL INFORMATION

1.1 Provider: Institute of Technology Carlow

1.2 Provider Locations: Carlow Main Campus, Extended Campus Centres

1.3 Date of Visit: Thursday 11 May 2017

1.4 Overview: 1. The purpose of the visit was to evaluate proposed new

Level 6 and Level 7 awards which have been developed for the Aviation Industry. The programmes build on IT

Carlow's provision of programmes in this area.

2. The Panel noted the Institute's intention to deliver these programmes at a location in Dublin, with support being

provided by the main campus of IT Carlow.

1.5 Principal Programme:

Evaluation

| Type of Award | Level | Proposed Programm Evaluated | ne Title | Total Credits | Proposed Embedded Exit Award Evaluated | Exit Credits |
|---|---------|--|--|------------------|---|-----------------|
| Major | 7 | Bachelor of Science in Flight Operations | | 180 | Higher Certificate in Science in Flight Dispatching | 120 |
| Number of Annual Intakes: | | | 1 part-time intake | | | |
| Duration: | | | Part-time: 3 academic years | | | |
| Target Learner Groups: | | | Initially the programme will be targeted at applicants who have a proven interest in aircraft flight dispatching and operations (to include overseas). | | | |
| Enrolment Date: | | | September 2017 | | | |
| Expected Number of Learners per Intake: | | | 20 | | | |
| Approve | d Count | ries for Provision: | Ireland | | | |

Approval The following programme is approved subject to the decisions set out in Section 3 below.

| Type of Award | Level | Approved Programme Title | Total Credits | Approved Embedded Exit Award | Exit Credits |
|---------------|-------|-------------------------------|------------------|----------------------------------|-----------------|
| Major | 7 | Bachelor of Science in Flight | 180 | Higher Certificate in Science in | 120 |
| | | Operations | | Aircraft Flight Dispatching | |

FINAL APPROVED Page 1 of 10

1.6 Associated Programme:

Evaluation

| Type of Award | Level | Proposed Programm Evaluated | e Title | Total Credits | Proposed Embedded Exit Award Evaluated | Exit Credits |
|---|-------|---|---|------------------|--|-----------------|
| Major | 6 | Higher Certificate in Science in Flight Dispatching | | 120 | None | |
| Number of Annual Intakes: | | | 1 part-time intake | | | |
| Duration: | | | Part-time: 2 academic years | | | |
| Target Learner Groups: | | | Initially the programme will be targeted at applicants who have a proven interest in aircraft flight dispatching (to include overseas). | | | |
| Enrolment Date: | | | September 2017 | | | |
| Expected Number of Learners per Intake: | | 20 | | | | |
| Approved Countries for Provision: | | | Ireland | | | |

Approval

| Type of Award | Level | Proposed Programme Title Evaluated | Total Credits | Proposed Embedded Exit Award Evaluated | Exit Credits |
|---------------|-------|--|------------------|--|-----------------|
| Major | 6 | Higher Certificate in Science in Aircraft Flight Dispatching | 120 | None | |

FINAL APPROVED Page 2 of 10

1.8 Evaluation Panel Membership:

| Name | Role | Affiliation |
|-------------------|---------------------------------------|---|
| Mr Colin McLean | Chairperson | Registrar, Institute of Technology Sligo |
| Dr Juliana Early | Academic Representative | Lecturer and Programme Director Aerospace Engineering, Queen's University Belfast |
| Ms Ruth Thewlis | Industry / Academic Representative | Managing Director, Academy of Aviation, Dublin Airport |
| Mr Benoit Guyot | Industry Representative | Load Control Manager, Sky Handling Partner |
| Mr David Denieffe | Secretary to Panel | Vice President for Academic Affairs & Registrar, Institute of Technology Carlow |
| Ms Dolores McCann | Admin Support | PA to Vice President for Academic Affairs & Registrar, Institute of Technology Carlow |

1.5 Programme Development Team Attendance Register:

Dr Patricia Mulcahy, President

Mr Brian McQuaid, Head of Faculty of Engineering

Mr Eoin Homan, Head of Department of the Built Environment and Extended Campus

Ms Anne Meaney, Extended Campus Coordinator

Mr Roddy McNamee, Lecturer, Aerodynamics

Ms Anita Hogan, Lecturer, Lecturer, Groups and Team Dynamics

Mr Con Cunningham, Lecturer, Aircraft Weight and Balances

Mr Des Whitty, Lecturer, Human Factors

Mr Tony O'Gorman, Lecturer, Management and Introduction to Health and Safety

Ms Norma Murphy, Lecturer, Project Management and Business Continuity Planning.

Apologies

Mr Kevin Humphreys, Associate Lecturer Ms Clare O'Donoghue, Associate Lecturer.

FINAL APPROVED Page 3 of 10

2. EVALUATION AGAINST THE VALIDATION CRITERIA

2.1 Examination of the Programmes:

The Panel noted the alignment of the validation to the criteria set out in the Core Policies and Criteria for the Validation by QQI of Programmes of Education and Training 2016 (including sub criteria set out in the QQI template for Independent Evaluation Report on an Application for Validation of a Programme of Education and Training).

The Panel met with the academic staff involved in the design of the programmes.

To examine the programmes against the criteria for the Institute's Policy and Procedures for the Design, Development, Validation and Withdrawal of all Programmes at Award Levels 6-10 in the NFQ 2016.

The Panel heard how the submission had been developed.

The Panel agreed that the programmes are in-line with the Institute of Technology Carlow's *Policy and Procedures for the Design, Development, Validation and Withdrawal of all Programmes at Award Levels* 6-10 in the NFQ 2016.

To examine the programmes against the requirements of the Qualifications and Quality Assurance (Education and Training) Act 2012.

The Panel is satisfied that the programmes meet the requirements of the Qualifications and *Quality Assurance (Education and Training) Act 2012.*

To examine the programmes so that they fit with the Institute's *Strategic Plan*.

The Panel is satisfied that the programmes are consistent with the Institute's *Strategic Plan 2014-2018*

To examine the programme against the QQI Awards Standards.

The Panel ask the Programme Team to review the submission document to ensure that all language used is at the correct QQI Award Standard.

Also the mapping of learning outcomes to the QQI Award Standards for the level 6 programme should be included in the submission document.

To examine the proposed programme titles and ensure that they are fit for purpose

Following discussion, the Panel agreed that the Level 6 programme should include 'Aircraft' in its award specialisation title.

As the Level 6 will be a Higher Certificate in Science award and the Level 7 will be a Bachelor of Science award, the Panel ask that 'technical' be strengthened and embedded into all modules of the programme, with a particular focus on maths.

The above will ensure that the programme titles are accurate and fit for the purpose of informing prospective stakeholders.

To examine the rationale and requirements for the programmes

The Panel is satisfied with the research undertaken in developing these two programmes, including consultation with prospective learners and industry professionals.

FINAL APPROVED Page 4 of 10

The Panel welcomed the development of these programmes and agreed that they will be a fantastic addition to the aviation industry.

The Panel recognised that there are currently no third level qualifications for Aircraft Flight Despatching or for Flight Operations available in Ireland or in Europe.

The Panel encourage the Programme Team to:

- Investigate developing links with industry, regulatory and professional bodies to gain recognition for these programmes, e.g., in the areas of security, dangerous goods, human factors and safety management systems.
- Establish of an industry advisory board that would feed into the ongoing monitoring and development of these programmes, to ensure programme currency and for regulatory aspects, etc.

To examine the access, transfer and progression arrangements

The Panel ask that there will be clear and transparent procedures in place for recognition of prior learning for entry onto these programmes.

In addition, the Panel ask the Programme Team to make clear and transparent, in the submission document:

- Access for learners who are not / or have not been engaged in the aviation industry
- What 'further selection arrangements' refers to, *q.v.*, page 39.
- 'BSAT' entry requirements.

Progression opportunities for graduates of these programmes must be articulated in the submission document.

The Panel encourage the Programme Team to consider developing an Apprenticeship in this area.

The Panel encourage the Programme Team to investigate recruiting learners from outside of Ireland.

To examine curriculum content so that it is well structured and fit for purpose

The Panel ask the Team to review the programme syllabus:

- Review programme submission document and APS to correct typos, module credits, assessment breakdown, anticipated workload for both full and part-time learners, field of classification, learning outcomes and indicative content where missing. Also ensure a more complete indicative content for each module.
- 2. Make clear and transparent in the programme document how co-shared modules will be delivered, e.g., logistics, capacity, etc.?

FINAL APPROVED Page 5 of 10

- 3. Include Exit Award after 120 credits on the Level 7 programme schedule.
- 4. Incorporate 'foundations of basic business' into programme syllabi.
- Increase the volume of mathematics to reflect the technical nature of the programmes. This might include a module at Stage 2 to cover vectors, probability and statistics, risk, uncertainty and analysis.
- 6. To assist learners who are currently employed in the industry or those who wish to gain employment whilst studying on these programmes, the Panel recommend that 'security' should be strengthened in the early stages of both programmes.
- 7. Embedding 'incident command' into the Level 6 award so that learners will have exposure to this topic earlier in the programmes.
- 8. Transport and Dangerous Goods By Air: Consider incorporating the 'Level 10' training and accreditation certification.
- 9. Human Factors:
 - Encourage use of key individual guest speakers
 - Consider Level 10 training and accreditation certification
- 10. Basic Aerodynamics:
 - Ensure that all learning outcomes are relevant to this programme
 - Learning outcome number 6 to be removed.
- 11. Management: Correct assessment breakdown.
- 12. Groups and Team Dynamics:
 - Correct credits and assessment weighting
 - Include more detail under indicative content.
- 13. Aviation Sector Project: Assessment is Project:100.
- 14. Air Traffic Management and Services: Include fulltime workload.
- 15. EU Aviation Policy: Language used must be at Level 7 of the NFQ.
- 16. Business Continuity and Project Management:
 - Include the workload for both fulltime and part-time
 - Expand on learner toolsets
 - Include more detail under description.

FINAL APPROVED Page 6 of 10

- 17. Security and Incident Command and risk

 Management in the Operational Environment:
 - Encourage use of industry experts in the delivery of this module
 - To give part-time learners who work in the aviation industry an opportunity to progress in their workplace whilst studying on this programme, consider delivering this module at an earlier stage.

To examine the ethical perspectives of the programmes

The Panel ask that the programmes will have procedures in place to ensure that any teaching, learning or research activity shall be conducted in a manner that is morally and professionally ethical.

To examine the assessment strategies and to ensure that they are sound

The Panel noted the proposed assessment strategies.

To examine the teaching and learning strategies to ensure that they are sound

The Panel noted the teaching and learning strategies employed by the Institute of Technology Carlow and agreed that they are sound.

The Panel noted that the Institute of Technology uses 'Blackboard' as a virtual learning environment tool.

To examine the teacher-learner dialogue process and to ensure that learners will be well informed, guided and cared for

The Panel noted that current modes of communication and interaction between academic, technical, administrative, general support staff and IT Carlow learners themselves are excellent.

The Panel noted the current assessment feedback mechanisms within the Faculty of Engineering.

The Panel noted that learner representatives of these two programmes will have the opportunity to sit on their own Programme Stream Board and also on the Institute's Academic Council and Governing Body.

To ensure the programme is well managed and resourced

The Panel recognised the high quality of lecturers that will deliver modules on both of these programmes; their Industry experience is highly commended. However to remain at the cutting edge, lecturers must be encouraged to participate on continuing professional development programmes and to engage in research.

The Panel encourage the use of guest lecturers from industry, where possible, to assist in the delivery of these programmes.

FINAL APPROVED Page **7** of **10**

The Panel visited the Faculty of Engineering and the Aircraft Hangar; the Panel were impressed with the resources available to this prospective cohort of learners.

The Panel commend the positive services provided to IT Carlow learners by Student Services, Sports & Recreation, Library, Computer Services, Restaurant, *etc.*

The Panel is happy that the necessary physical facilities and resources are available at the Institute of Technology Carlow and at the delivery centre in Dublin to provide these two new proposed Level 6 and Level 7 programmes.

FINAL APPROVED Page 8 of 10

3. DECISIONS (For the attention of Institute of Technology Carlow Academic Council)

The Panel would like to commend the Programme Development Team on their qualifications, experience and their expertise.

The Panel would like to commend the Institute on their ongoing development in this area.

The Panel encourage the Programme Team to market these programmes to the industry and across Europe.

1.1 Determination

The evaluation panel recommend the validation of the following programmes:

| Type of Award | Level | Approved Programme Title | Total Credits | Approved Embedded Exit Award | Exit Credits |
|------------------|-------|----------------------------------|------------------|----------------------------------|-----------------|
| Major | 7 | Bachelor of Science in Flight | 180 | Higher Certificate in Science in | 120 |
| | | Operations | | Aircraft Flight Dispatching | |
| Major | 6 | Higher Certificate in Science in | 120 | None | |
| - | | Aircraft Flight Dispatching | | | |

Subject to the following listed under 3.2, 3.3 and 3.4 below.

3.2 Conditions

The evaluation panel require that the Programme Development Team should take note of the following conditions and that a satisfactory response to those conditions shall be received before the validation is considered by Academic Council of the Institute.

- 1. Rename the specialised area of the Higher Certificate in Science to Aircraft Flight Dispatching.
- Review programme documentation to ensure accuracy in programme schedule particularly on credits, assessment breakdown and exit award, anticipated workload especially for part-time learners, mapping of learning outcomes at Level 6 to award standards and more complete indicative content.
- 3. Increase the volume of mathematics to reflect the technical nature of the programme. This might include a module at Stage 2 to cover vectors, probability and statistics, risk, uncertainty and analysis.
- 4. Explicitly include more content on security in the earlier stages of the programme.

3.3 Recommendations

Recommendations are suggestions made by the Programme Evaluation Panel in the spirit of improving the proposed programme. While these are not binding, the reasons for not incorporating a recommendation have to be clearly stated by the Programme Development Team in its response to the Evaluation Report.

- 1. Mindful of the national initiatives and processes on new apprenticeships, give consideration to the development of an apprenticeship in this area.
- 2. Examine progression opportunities to the Institute's engineering programmes in Aerospace and Aircraft Systems.
- Encourage greater industry engagement and advisory processes particularly through the involvement of guest speakers and agreements to support those students not working in the industry.

FINAL APPROVED Page 9 of 10

- 4. Consider seeking relevant industry, regulatory and professional body recognition where appropriate such as with the RAeS and in specific module areas such as security, dangerous goods, human factors and safety management systems.
- 5. Clarify further the specific RPL arrangements for those working in the industry.
- 6. Where students are drawn from outside of the industry, a specific induction programme, incorporating eLearning and mentoring should be put in place.

3.4 Programme Schedules and Programme Abstracts

Amended Programme Schedules, to incorporate the above, and the Programme Abstract, <u>must</u> be submitted with the Response to this Panel Evaluation Report.

| 3.5 Approval | |
|--|---|
| Programme Evaluation Report Ap | pproved by: |
| Mr Colin McLean Chairperson to Panel (Registrar, Institute of Technology | Mr David Denieffe Secretary to Panel y Sligo) (Vice President for Academic Affairs & Registrar Institute of Technology Carlow) |
| | |

FINAL APPROVED Page 10 of 10