School/Department: Computing
Date: 3 April 2019

Title of the Programme: MSc in Computing in Applied Computing Research

Chairperson: Mr Terry Twomey VP Academic Affairs & Registrar, LIT
Members of the Panel: Celia O'Hagan, Mike McTear, Ailish Mc Kiernan and Louise Crotty.
Secretary: Dr George Onofrei
LYIT Staff: Thomas Dowling; Connolly James; Furey Eoghan; Sweeney Edwina; Feeney Mairead; McKelvey Nigel; Douglas Mandy.

Criteria for the Validation of a New Programme

1. The Programme Aims and Objectives are clear and consistent with the Award sought.
2. The Programme concept, implementation strategy are well informed and soundly based.
3. The Programme’s Access, Transfer and Progression arrangements are satisfactory.
4. The Programme’s written curriculum is well structured and fit for purpose.
5. There are sufficient qualified and capable programme staff.
6. There are sufficient physical resources to implement the programme as planned.
7. The learning environment is consistent with the needs of the programme learners.
8. There are sound Teaching, Learning and Assessment Strategies.
9. Learners enrolled on the Programme will be well informed, guided and cared for.
10. The Programme will be well managed.

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors
(For the attention of the Academic Council)

Commendations:

1. The panel commends the Programme Board for their vision to reach out to the education community to promote applied computing research.

2. The panel commend the team on the readability and quality of documentation.

3. The panel were impressed by the level of preparation and engagement from the Programme Team; and that the programme had been well thought through.

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

1. They should consider the management of the student assessment within the Banner System by engaging with the Examination Office.

2. Reconsider the wording of the rationale around the applied nature of the programme.

Response from the Department of Computing to Recommendations

1. The interim course board has discussed this matter and we will ensure there is a full engagement with the Examinations Office to make this happen.

2. A number of changes have been made to the text in pages 9 and 10 to highlight and explain the applied nature of the programme.

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

n/a.

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors
PART 4 PROPOSED PROGRAMME SCHEDULE(S)

Proposed Programme Schedule – Year 1 Full-Time / Part-time

Name Of Provider: Letterkenny Institute of Technology

Title Of Award: Certificate in Applied Computing Research
MSc in Computing in Applied Computing Research

Area Of Specialisation: Applied Computing Research

Learning Mode Offered: Full-time / Part-time

Stage: Award

Date Effective: September 2019

<table>
<thead>
<tr>
<th>Semester</th>
<th>Title of examination subject</th>
<th>Subject status</th>
<th>ECTS credits</th>
<th>Total Contact Hours</th>
<th>Allocation of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level</td>
<td>Number</td>
<td>L/T</td>
</tr>
<tr>
<td>IT Systems for Delivery of Healthcare</td>
<td>E</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Data Operations</td>
<td>E</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Systems Engineering for ICT in Healthcare</td>
<td>E</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Data Analytics and Statistical Analysis</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Assessing Wearable Sensing Systems</td>
<td>E</td>
<td>9</td>
<td>5</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Ethics in Healthcare Research</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>Wearable Sensor Technologies</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
</tr>
</tbody>
</table>

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Grade</th>
<th>Final Exam</th>
<th>Project</th>
<th>Lab</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and Development for Healthcare Innovation</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>DevOps Software Engineering</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>OO Programming for Server Administration</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Advanced Database Development</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Computer Systems Programming</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Enterprise and Data Centre Networking</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Private Cloud Technologies</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Security and Legal Issues</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Storage Technologies</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Virtual Server Administration</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Cryptography and Forensic Analysis</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Information Security Management 1</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Secure Infrastructure</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
<tr>
<td>Software Compliance</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
</tr>
</tbody>
</table>

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors
<table>
<thead>
<tr>
<th>Threat Management</th>
<th>E</th>
<th>9</th>
<th>10</th>
<th>26</th>
<th>26</th>
<th>198</th>
<th>250</th>
<th>100</th>
<th></th>
<th></th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
<td>100</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Machine Learning</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
<td>50</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Mathematics For Analytics</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>52</td>
<td>198</td>
<td>250</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Big Data Analytics</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
<td>100</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Big Data Architecture</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
<td>100</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Artificial Intelligence 1</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
<td>50</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Artificial Intelligence 2</td>
<td>E</td>
<td>9</td>
<td>10</td>
<td>26</td>
<td>26</td>
<td>198</td>
<td>250</td>
<td>100</td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Legend

| MSc in Digital Healthcare | MSc in DevOps | MSc in Cloud Technologies | MSc in Cybersecurity | MSc in Big Data Analytics | MSc in Big Data Analytics and Artificial Intelligence |

Total ECTS credits required for stage: 30

Special Regulations:

No more than 20 ECTS Credits can be taken from a single MSc Programme

Note 1: Not all modules will necessarily be available in a given year

Note 2: Modules may run in different semesters depending on the intake cycle

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors
**Proposed Programme Schedule – Year 1 Semester 2 & 3 – Full-Time**

**Name Of Provider:** Letterkenny Institute of Technology  
**Title Of Award:** MSc in Computing in Applied Computing Research  
**Area Of Specialisation:** Applied Computing Research  
**Learning Mode Offered:** Full-time  
**Stage:** Award  
**Date Effective:** September 2019

<table>
<thead>
<tr>
<th>Semester</th>
<th>Title of examination subject</th>
<th>Subject status</th>
<th>ECTS credits</th>
<th>Contact hours (per week over 26 weeks)</th>
<th>Allocation of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level</td>
<td>Number</td>
<td>L/T</td>
</tr>
<tr>
<td>Dissertation</td>
<td></td>
<td></td>
<td>M</td>
<td>9</td>
<td>60</td>
</tr>
</tbody>
</table>

**Total ECTS credits required for stage:** 60

**Special Regulations:**

Students must complete 30 credits worth of taught modules  
The Dissertation topic must be consistent with the overall Programme Learning Outcomes.

---

*Note: It is Institute policy to publish the Final Reports of the Panel of Assessors*
**Proposed**

**Proposed Programme Schedule – Year 1 – Part-Time**

Name Of Provider: Letterkenny Institute of Technology

Title Of Award: MSc in Computing in Applied Computing Research

Area Of Specialisation: Applied Computing Research

Learning Mode Offered: Part-time, ACCS

Stage: Award

Date Effective: September 2019

<table>
<thead>
<tr>
<th>Semester</th>
<th>Title of examination subject</th>
<th>Subject status</th>
<th>ECTS credits</th>
<th>Contact hours (per week over 52 weeks)</th>
<th>Allocation of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CA</td>
<td>Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>Independent Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>25</td>
</tr>
</tbody>
</table>

**Total ECTS credits required for stage:** 60

**Special Regulations:**

Students must complete 30 credits worth of modules from semesters 1 to 3.

The Dissertation topic must be consistent with the overall Programme Learning Outcomes.

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors
Programme Evaluation Report Approved by:

Terry Twomey
Chairman to Panel
(VP, Academic Affairs and Registrar, Limerick Institute of Technology)

Date 20/5/2019

Billy Bennett
(VP for Academic Affairs and Registrar, Letterkenny IT)

Date 20/5/19

Note: It is Institute policy to publish the Final Reports of the Panel of Assessors