

Part 1 Programme details

Proposed title/Existing title and code	Higher Diploma in Clinical Measurement Science
Mode and duration of programme	2 years full-time
ECTS	120
DIT award(s) sought	Higher Diploma in Clinical Measurement Science
Classifications of award(s)	Distinction, Merit Grade 1, Merit Grade 2, Pass
School responsible	Physics & Clinical & Optometric Sciences
Professional body accreditation and relevant dates (where applicable)	Irish Institute of Clinical Measurement Science recognition has been sought, an application will need to be made to HSE to have the programme recognised as an appropriate entry qualification for employment.
External provider type (where applicable)	N//A
Delivery location	City Campus – Kevin Street

Part 2 Programme approval information

Date of initial approval (of Q1A) by SLT's Academic and Research Committee/SLT	February 2019
Date of validation/review event	20 th June 2019
Date of approval by Academic Council and Governing Body	
Proposed date of commencement	September 2019

Part 3 Programme background/structure***Background***

This two year Higher Diploma is designed to educate and train Clinical Physiologists who will gain employment principally in clinical hospital laboratories performing diagnostic tests in the areas of Cardiac Physiology, Neurophysiology, Respiratory Physiology or Vascular Physiology. This is a graduate entry programme and is at level 8 on the National Framework of Qualifications, it is designed as an entry route to this profession for suitability qualified graduates.

Clinical Measurement Science is one of the professions listed as a Health and Social Care profession and falls under the auspices of CORU, though as yet, is not regulated by them.

Stated aims and learning outcomes of the programme

The broad aim of this programme is to provide graduates with the clinical, diagnostic, scientific, analytical and practical problem-solving skills required to perform successfully as a

core member of the medical diagnostic team within clinical physiology laboratories in hospital settings. Strong emphasis is placed on developing key attributes to enhance the personal and professional skills and qualities of graduates that are sought by the health care services within the state and abroad, such as interpersonal skills, adaptability and an appropriate level of computer literacy.

Programme Learning Outcomes

Knowledge

On successful completion of this programme the graduate will:

- Have detailed knowledge and understanding of the theory and concepts relating to the Clinical Measurement Science profession.
- Have a detailed knowledge to be a competent practitioner in one of the disciplines of Clinical Measurement Science (Cardiac, respiratory, vascular or neurophysiology) and a detailed knowledge in a second discipline.
- Have a strong understanding of the principles and practice of laboratory and clinical conduct and safety.

Knowhow and Skill

On successful completion of this programme the graduate will:

- Be able to use clinical instrumentation in their specialist discipline in the Clinical Measurement Science environment confidently.
- Be able to undertake clinical and physiological measurements in a hospital clinical physiology laboratory.
- Be able to analyse, interpret, present and critically evaluate scientific and clinical data.
- Demonstrate the ability to carry out an individual research project in clinical measurement science, involving the description of the problem, the formulation and implementation of solutions, an appreciation of the significance of the project outcomes and effective communication of the outcomes.
- Be able to confidently and readily adapt to new and emerging technologies within their clinical discipline.
- Demonstrate the skills required to function as part of an interdisciplinary team in a clinical setting.

Competence

On successful completion of this programme the graduate will:

- Demonstrate competence in complex and specialized skills required for technical diagnostic testing in the health sector.
- Demonstrate the ability to participate as member of a team in the solution of a problem, both as team-leader and as team member, to identify the knowledge required to solve the problem, and to critically evaluate their own contribution to the work of the team.
- Have developed a view of the relevance of their field of study to the health care sector and to society at large.
- Appreciate the importance of continual professional development within the field of Clinical Measurement Science.
- Recognize the vocational nature of clinical measurement science and will have developed a patient centered ethos to their practice.

Programme structure Year 1 consists of 1 10ECTS modules, 2 5ECTS modules and 2 20ECTS Clinical Modules. Year 2 consists of 3 5ECTS modules, a 10ECTS final year project, a 15ECTS hospital placement and 2 10ECTS Clinical Modules.

Entry Requirements Normally, applicants must hold a degree at level 8 on the National Framework of Qualifications with at least a grade of 2.2 or higher or equivalent. Their level 8 programme must contain introductory science and mathematics modules and intermediate / advanced modules in anatomy and physiology.

Student assessment

In accordance with TU Dublin City Campus General Assessment Regulations

Derogations from the General Assessment Regulations, including rationale for derogation and view of the Panel:

50% pass mark applies for all clinical modules.

Part 4 Validation Details and Membership of Panel

Schedule of meetings: Thursday, 20th June 2019

Venue: Boardroom in Kevin Street

- 10.00 hrs Refreshments (tea/coffee) served. Introductory meeting between Panel and Head of School and programme chair and brief presentation regarding proposed programme.
- 10.45 hrs Private meeting of Panel to discuss agenda.
- 11.15 hrs Meeting of Panel with Head of School, Chairperson and appropriate members of the Programme Committee to discuss specific issues raised by the Panel.
- 12.15 hrs Lunch
- 13.00 hrs Meeting of Panel with staff teaching on the programmes to discuss such matters as syllabi, teaching methods and assessment issues.
- 14.15 hrs Private Meeting of the Panel
- 15.30 hrs Final meeting of Panel with Head of School and appropriate staff from the School of Physics.

Panel Membership

External Members

- Tanya Byrne Chief Vascular Physiologist, Vascular Laboratory, Galway University Hospital
- Prof. Virginia Fonseca Master in Medical Education, Instituto Politécnico de Lisboa, Portugal

Internal Members

- Dr Clíona Doris Conservatory of Music & Drama, TU Dublin City Campus (Rathmines)
- Damian Bourke School of Computer Science, TU Dublin City Campus (Kevin Street)
- Declan Doran School of Accounting & Finance, TU Dublin City Campus (Aungier Street)

Officer

- Nicole O'Neill Quality Assurance Officer, TU Dublin City Campus, Park House, Grangegorman

Documentation submitted: Programme Overview, Student Handbooks and Staff Profiles.

Part 5 Summary of Panel findings against key questions

Note: the Panel's findings (ie yes/no) and any additional comments against each of the key questions should be recorded below. Where a 'no' is recorded, an associated condition or recommendation should be included in Part 6, Findings of the Panel.

Is the market demand and need for the programme clear and articulated?	Yes
Are the aims, objectives and learning outcomes of the programme well-founded and clearly formulated?	Yes
Are the entry requirements clear and appropriate?	Yes, see recommendations
Are the arrangements for access, transfer and progression in accordance with Institute policy and NFQ?	Yes
Are the programme learning outcomes at the appropriate level as set out by the NFQ requirements?	Yes
Do the individual modules 'add up' to a coherent programme?	Yes
Are Graduate Attributes embedded within the programme?	Yes
Will the accumulation of the module learning outcomes result in the attainment of the programme learning outcomes?	Yes
Is there appropriate use of student-centred learning, teaching and assessment strategies, which recognise the needs of diverse student groups?	Yes
Do the curricula and teaching schemes in each module descriptor give realisable substance to the module's aims, objectives and learning outcomes?	Yes
Are the assessment methods and criteria aligned to the learning outcomes in each module?	Yes
Are facilities and resources, including staff, in place to support the delivery of the programme at the standard proposed?	Yes see recommendations
Is there parity between off-campus/on-campus delivery (if applicable)?	N/A
Are the roles and responsibilities of each partner clearly specified (if applicable)?	N/A

Part 6 Recommendations of the Panel

- **Overall recommendations of the Panel**

The panel recommends approval of the Higher Diploma in Clinical Measurement Science at level 8 at the NFQ subject to the implementation of the following conditions and consideration of the following recommendations.

- **Conditions**

Note: Conditions are attached where the Panel agrees that changes must be made to the programme / programme documentation prior to the commencement of the programme. Conditions must be set where issues are identified that relate directly to academic standards or to Institute regulations or procedures. It should be clear what is required in order to meet the condition, and the associated timeline.

A new programme cannot run unless the Panel has received a response to its report and has indicated that it is happy that conditions are met, and the report of the Panel is then adopted by Academic Council.

- Ensure that a current practitioner sits on the application interview panel.
- **Recommendations**
Note: recommendations are attached where the Panel considers that the programme would benefit from particular changes, or from a review of certain aspects of the programme over a period of time, with changes made if required. While recommendations are advisory in nature, there is an expectation that all recommendations are responded to and acted upon as appropriate.
- Include in the programme documentation, the contact hours and supervision arrangements that are provided and the milestones and assessment requirements for the final year project.
- For the discipline topics with larger numbers, further consideration needs to be given to how the tutorials (and laboratories) will be optimally resourced in terms of staffing, equipment and learning and teaching strategies.
- Work towards incorporating a Gastro Intestinal (GI) stream on this programme in the future to meet the national need.
- Consider providing more details in the programme entry criteria in relation to the level of Computing Skills candidates will need to have prior to entry to the programme.
- Consider strengthening in the documentation how major and minor discipline choices will be allocated and the criteria that will be utilised.
- Provide more details on the innovative learning, teaching and assessment methods deployed on the programme in the module descriptors and Student Handbooks.
- Review the balance between CA and examinations across the programme and provide more details on assessment and feedback in the documentation.
- Strengthen the section on how RPL will operate on the programme.
- Update the reading lists in the module descriptors.