



Name: Bharath Tamilmani

Award: Master of Science (Engineering)

Field of study: Telecommunications and Wireless Systems

Classification: Pass With Merit

Award Date: 11th December 2023

The University of Liverpool is a member of the Russell Group, which represents the 24 leading UK universities committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector.

This Higher Education Achievement Report incorporates the model developed by the European Commission, Council of Europe and UNESCO/CEPES for the Diploma Supplement.

The purpose of the Supplement is to provide sufficient recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context and status of the studies that were pursued and successfully completed by the individual named on the original qualifications to which this Supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

The University of Liverpool only produces HEARs in a digital format. Only HEARs accessed via <https://verify.liverpool.ac.uk> can be considered valid and verified.

INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1	Family name(s):	Tamilmani
1.2	Given name(s):	Bharath
1.3	Date of birth (day/month/year):	27th May 2000
1.4	Student identification number or code:	201650599
	HESA reference number:*	2211266505990

*HUSID (HESA Unique Student Identifier) is the unique national identifying number for students registered at a UK university. It is defined by HESA, the UK's Higher Education Statistics Agency.

INFORMATION IDENTIFYING THE QUALIFICATION

2.1	Name of qualification and (if applicable) title conferred:	Master of Science (Engineering) The power to award degrees is regulated by law in the UK.
2.2	Main field(s) of study for the qualification:	Telecommunications and Wireless Systems
2.3	Name and status of awarding institution(s):	This degree is awarded by the University of Liverpool, a university established by Royal Charter and a recognised body for the award of degrees.
2.4	Name and status of institution(s) (if different from 2.3) administering studies:	As above
2.5	Language(s) of instruction/examination:	All teaching and assessment that leads to a University of Liverpool award is in English, except for programmes of study involving language studies, where some teaching and assessment is in the relevant language(s).

INFORMATION ON THE LEVEL OF THE QUALIFICATION

- 3.1 Level of qualification:** Postgraduate programme assigned to level 7 in the Framework for Higher Education Qualifications (see Section 8 for further details on the UK Higher Education System), and Bologna FQ-EHEA 2nd cycle degree compatible
- 3.2 Official length of programme:** One year
- 3.3 Access requirement(s):** Detailed information regarding admission to the programme is available in the University's Online Prospectus at <https://www.liverpool.ac.uk/study/postgraduate/courses/taught/>

INFORMATION ON THE CONTENTS AND RESULTS GAINED

- 4.1 Mode of study:**
2022-2023 - Full time

4.2 Programme requirements:

The programme was developed to meet the requirement of the telecommunications and wireless systems industry for engineers with high level knowledge and skill in both areas covered by the title. It has evolved to address the rapid technological changes in these subjects. The combination is attractive to a wide range of employers, including both directly and indirectly involved companies in the telecommunications and wireless systems industry (e.g. instrumentation and process control).

1. The primary aim is to provide graduates who already have a good general level of knowledge and ability in electronics or closely related subjects (that is recent electronics graduates, graduates of certain Computer Science programmes, etc) with advanced knowledge and capabilities in the specific areas of wireless systems and telecommunications;
2. The programme is also designed to provide new graduates with a greater awareness of industrial requirements and assist in the application of the two disciplines in industry;
3. The students will be familiar with relevant industrial standard computer-aided design tools in this area.

A programme of study leading to a Master's degree award shall normally require successful completion of 180 credits (90 ECTS) either at FHEQ level 7, or a combination of FHEQ level 7 and up to 30 credits of modules at FHEQ level 6.

4.3 Programme details, and the individual grades/marks/credits obtained:

Programme Start Date: 26th September 2022

Programme End Date: 21st November 2023

2022-2023 - The University of Liverpool (UK) - Year 1

Module Code	Title	Credits	ECTS	Semester	FHEQ Level	Grade	Result
ELEC 431	Engineering Programming	15	7.5	1	7	66	P
ELEC 463	Mobile Communications and Security	15	7.5	1	7	55	P
ELEC 477	Digital and Wireless Communications	15	7.5	1	7	57	P
ELEC 411	Radio Propagation for Wireless Systems	7.5	3.75	2	7	65	P
ELEC 415	Information Theory And Coding	7.5	3.75	2	7	76	P
ELEC 461	Communications Networks	15	7.5	2	7	57	P
ELEC 462	Wireless Systems and CAD Designs	15	7.5	3	7	71	P
ELEC 474	Advanced Signal Processing	15	7.5	3	7	70	P
ELEC 483	Research Skills & Project Management	15	7.5	3	7	63	P

ELEC 460	MSc Project	60	30	S	7	65	P
Credits Obtained		180					

* - Indicates a mark obtained at a second or subsequent sitting

E - Indicates Extenuating Circumstances

4.4 Module grading scheme and, if available, grade distribution guidance:

Grade (100 point scale)

50 to 100

40 to 49

Less than 40

Pass

Narrow Fail (but compensation may be allowed in accordance with University's rules)

Fail

4.5 Overall classification of the qualification (in original language):

Pass With Merit

Information about the degree classification methodology used at the University of Liverpool is available at <https://www.liverpool.ac.uk/aqsd/academic-codes-of-practice/code-of-practice-on-assessment/>

INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study:

Attainment of an postgraduate degree may entitle access to postgraduate study (Bologna FQ-EHEA 3rd cycle/level 8 qualifications or equivalent) and/or professional career opportunities.

5.2 Professional status (if applicable):

ADDITIONAL INFORMATION

6.1 This section provides details of extra-curricular student awards and activities that represent achievement, and have been verified by the University of Liverpool. Details of prizes gained whilst at the University are also listed here. Please note that the number of extra-curricular activities which the University and the Liverpool Guild of Students are currently able to verify is limited. Students may therefore have undertaken additional activities which have contributed significantly to their personal and professional development. They will be encouraged to record these in other documentation.

6.2 Further information sources:

Further information concerning the University of Liverpool may be obtained from the University's website (www.liverpool.ac.uk). A description of the UK higher education system may be obtained from the UCAS website (<https://www.ucas.com/ucas/undergraduate/getting-started/what-higher-education>).

CERTIFICATION OF THE HEAR

- 7.1 **Date:** 8th December 2023
- 7.2 **Award Date:** 11th December 2023
- 7.3 **Signature:** 
- 7.4 **Capacity:** Director of Student Experience & Enhancement
- 7.5 **Official Seal:**



INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

- 8.1 You will find further context on the awards we provide and the information on the national higher education system at the following webpage: <https://www.liverpool.ac.uk/graduation/official-documentation/sharing-your-hear/hear-content/>