# HIGHER EDUCATION ACHIEVEMENT REPORT
## (Diploma Supplement)

## CONTEXTUAL INFORMATION

UCL was established in 1826 in order to open up education in England for the first time to students of any race, class or religion. UCL is a world-class, research-led, multi-faculty university, consciously and deliberately global and wide-ranging in its reach and ambition.

The Higher Education Achievement Report incorporates the model developed by the European Commission, Council of Europe and UNESCO/CEPES for the Diploma Supplement. The information on this Higher Education Achievement Report (HEAR) has been verified by University College London (UCL). The purpose of this HEAR is to provide the context of a qualification, including the level of the qualification, the programme of studies pursued and marks achieved. It may also include non-degree related achievements that are recognized and verified by UCL as being a significant activity to be recorded.

UCL produces the HEAR in digital format in partnership with the Tribal Group, which provides the student records database used by UCL, and its partner Gradintel (Graduate Recruitment Intelligence). Only HEARs obtained via the Gradintel website (www.gradintel.com) or printed transcripts bearing UCL's official seal are valid and verified records of achievement associated with an original qualification. A HEAR obtained from the Gradintel website is a verified document only at the time of printing.

## 1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

| | | |
|---|---|---|
| 1.1 | **Family name** | Babani |
| 1.2 | **Given name(s)** | Nikhil J |
| 1.3 | **Date of birth (day/month/year)** | 04 September 2000 |
| 1.4 | **Student identification number or code** | 20003486 |
| | **HESA identification number** | 2011490034866<br>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. |

## 2. INFORMATION IDENTIFYING THE QUALIFICATION

| | | |
|---|---|---|
| 2.1 | **Name of qualification and (if applicable) title conferred** | Master of Engineering<br>The power to award degrees is regulated by law in the UK. |
| 2.2 | **Main field(s) of study for the qualification** | Engineering (Electronic and Electrical) |
| 2.3 | **Name and status of awarding institution** | University College London. UCL has taught and research degree awarding powers. |
| 2.4 | **Name and status of institution (if different from 2.3) administering studies (in original language)** | As awarding institution |
| 2.5 | **Language(s) of instruction/examination** | English |

## 3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

| | | |
|---|---|---|
| 3.1 | **Level of qualification** | 7 |
| 3.2 | **Official length of programme** | 4 academic years |

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**3.3    Access requirement(s)**          UCL's entry requirement range is A*A*A—ABB in A Levels.

## 4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

### 4.1. Mode of study

| Year | Mode of study |
|------|---------------|
| 2020 | Full-time |
| 2021 | Not in attendance: was Full-time |
| 2022 | Full-time |
| 2023 | Full-time |
| 2024 | Full-time |

### 4.2. Programme requirements

#### 4.2.1 Minimum standards

Refer to the UCL Academic Manual for information

#### 4.2.2 Educational aims

The programme provides a thorough coverage of the theory, devices and systems underpinning much modern technology, including: semiconductor devices and nano-electronics, control theory and communications, alongside business-related subjects.

#### 4.2.3 Learning outcomes

Please refer to course handbook for more information

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

| Programme start date | 28 September 2020 |
|----------------------|-------------------|
| Programme end date   | 13 June 2025 |

| Year | Code | Title | Attempt | Mark | Grade | Course Units | ECTS Credits |
|------|------|-------|---------|------|-------|--------------|--------------|
| 2020 | ELEC0002 | Introduction to Electronic Engineering | 1 | 76.30 | P | 15.00 | 7.50 |
| 2020 | ELEC0003 | Analog and Power Electronics 1 | 1 | 0.00 | NX | 0.00 | 0.00 |
| 2020 | ELEC0004 | Digital Electronics 1 | 1 | 0.00 | NX | 0.00 | 0.00 |
| 2020 | ELEC0005 | Physics of Electronics and Nanotechnology 1 | 1 | 0.00 | NX | 0.00 | 0.00 |
| 2020 | ELEC0006 | Signals and Systems 1 | 1 | 0.00 | NX | 0.00 | 0.00 |
| 2020 | ELEC0007 | Programming 1 | 1 | 0.00 | NX | 0.00 | 0.00 |
| 2020 | ENGF0001 | Engineering Challenges | 1 | 74.45 | P | 15.00 | 7.50 |
| 2020 | ENGF0002 | Design and Professional Skills 1 | 1 | 66.73 | P | 15.00 | 7.50 |
| 2020 | ENGF0003 | Mathematical Modelling and Analysis 1 | 1 | 74.33 | P | 15.00 | 7.50 |

| | | | | | | Course Units | ECTS Credits |
|---|---|---|---|---|---|---|---|
| | | TOTAL YEAR 2020 | | | | 60.00 | 30.00 |

| Year | Code | Title | Attempt | Mark | Grade | Course Units | ECTS Credits |
|---|---|---|---|---|---|---|---|
| 2021 | ELEC0003 | Analog and Power Electronics 1 | 1 | 53.92 | P | 15.00 | 7.50 |
| 2021 | ELEC0004 | Digital Electronics 1 | 1 | 82.87 | P | 15.00 | 7.50 |
| 2021 | ELEC0005 | Physics of Electronics and Nanotechnology 1 | 1 | 56.67 | P | 15.00 | 7.50 |
| 2021 | ELEC0006 | Signals and Systems 1 | 1 | 77.62 | P | 7.50 | 3.75 |
| 2021 | ELEC0007 | Programming 1 | 1 | 73.00 | P | 7.50 | 3.75 |
| | | TOTAL YEAR 2021 | | | | 60.00 | 30.00 |

| Year | Code | Title | Attempt | Mark | Grade | Course Units | ECTS Credits |
|---|---|---|---|---|---|---|---|
| 2022 | BENG0019 | Engineering Mathematics in Finance | 1 | 87.60 | P | 15.00 | 7.50 |
| 2022 | ELEC0008 | Design and Professional Practice 2 | 1 | 78.28 | P | 15.00 | 7.50 |
| 2022 | ELEC0009 | Analog Electronics | 1 | 66.08 | P | 15.00 | 7.50 |
| 2022 | ELEC0010 | Digital Design | 1 | 86.63 | P | 15.00 | 7.50 |
| 2022 | ELEC0019 | Electromagnetic Theory and Semiconductor Devices | 1 | 64.74 | P | 15.00 | 7.50 |
| 2022 | ELEC0020 | Photonics and Communication Systems | 1 | 67.36 | P | 15.00 | 7.50 |
| 2022 | ELEC0021 | Programming and Control Systems | 1 | 82.37 | P | 15.00 | 7.50 |
| 2022 | ENGF0004 | Mathematical Modelling and Analysis II | 1 | 80.78 | P | 15.00 | 7.50 |
| | | TOTAL YEAR 2022 | | | | 120.00 | 60.00 |

| Year | Code | Title | Attempt | Mark | Grade | Course Units | ECTS Credits |
|---|---|---|---|---|---|---|---|
| 2023 | BENG0091 | Stochastic Calculus and Uncertainty Analysis | 1 | 72.25 | P | 15.00 | 7.50 |
| 2023 | BENG0095 | Data Mining and Analysis | 1 | 81.73 | P | 15.00 | 7.50 |
| 2023 | ELEC0023 | Control Systems I | 1 | 87.00 | P | 15.00 | 7.50 |
| 2023 | ELEC0028 | Advanced Digital Design | 1 | 76.80 | P | 15.00 | 7.50 |
| 2023 | ELEC0036 | Project I | 1 | 78.00 | P | 30.00 | 15.00 |
| 2023 | ELEC0140 | Robotics for Electronic Engineering | 1 | 79.33 | P | 15.00 | 7.50 |
| 2023 | ELEC0147 | Advanced Engineering Mathematics | 1 | 84.00 | P | 15.00 | 7.50 |
| | | TOTAL YEAR 2023 | | | | 120.00 | 60.00 |
| | | TOTAL AWARDED | | | | 360.00 | 180.00 |

### 4.4. Grading scheme and, if available, grade distribution guidance

| Mark | Grade | Equivalent Classification |
|------|-------|---------------------------|
| 70 - 100 | A | First Class Honours |
| 60 - 69 | B | Second Class Honours (Upper Division) |
| 50 - 59 | C | Second Class Honours (Lower Division) |
| 40 - 49 | D | Third Class Honours |
| 0 - 39 | Fail | |

| Code Used | Explanation |
|-----------|-------------|
| AB / AZ | Absent |
| CX | Module Completed but result not available due to Covid-19 |
| DA | Deferred Assessment |
| EP | Deferral of Assessment already attempted |
| EX | Result Excluded from Final Classification |
| F / F1 / F3 | Fail |
| FC | Failure Condoned |
| FQ / FS / FZ | Failure to Qualify |
| IR | Result not yet available |
| LA | Deferred / Late Assessment expected |
| NC / NZ | Incomplete |
| NX | Result not expected |
| P | Pass |
| PF | Pass but required to re-sit (LLB students only) |
| R / RQ | Referred |
| WD | Withdrawn |
| WH | Result Withheld |
| ZZ | Ineligible for Assessment |

### 4.5. Overall classification of the qualification (in original language)

Not yet awarded

## 5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

### 5.1. Access to further study

Successful completion of this undergraduate programme will make the student eligible for entry to a range of postgraduate programmes in Engineering (Electronic and Electrical) and related disciplines.

### 5.2. Professional status (if applicable)

Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

## 6. ADDITIONAL INFORMATION

### 6.1 Additional information

Non degree related achievements
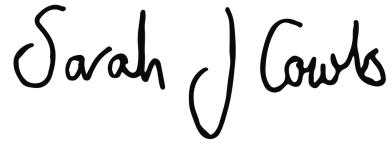
Not applicable

### 6.2. Further information sources

Further information can be found at www.ucl.ac.uk

## 7. CERTIFICATION OF THE HEAR

| | | |
|---|---|---|
| **7.1** | **Date** | 15 October 2024 |
| **7.2** | **Signature** | |

*Sarah J Cowls*

Sarah Cowls

| | | |
|---|---|---|
| **7.3** | **Capacity** | Executive Director of Student Services and Registrar |
| **7.4** | **Official stamp or seal** | |

## 8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

### Description of Higher Education in England, Wales and Northern Ireland

In the United Kingdom (UK), Higher Education (HE) is a devolved matter, with political oversight provided by the UK Government and Parliament (England), the Scottish Government and Parliament (Scotland), the Welsh Government and Parliament (Wales), and the Northern Ireland Executive and Assembly (Northern Ireland). HE provision is offered by many different types of institution that are active in teaching, research, and scholarship. The term includes all publicly funded universities and other HE institutions, alternative HE providers that offer HE courses but do not receive annual public funding, and further education colleges in England and Wales, which offer HE level courses.

**Degree Awarding Powers and University Title**
The power to award degrees is regulated by law in the UK. Those organisations granted the power to award HE degrees are referred to as 'Recognised Bodies', and a full list of these is published by the UK Government. It is an offence for an organisation to purport to award, or to offer a UK degree, unless it is authorised to do so. Degree- awarding bodies often work with other providers that do not have degree awarding powers to deliver provision which leads to a qualification of the degree-awarding body. The Listed Bodies Order confirms the providers that do not have the powers to award their own degrees, but offer programmes that lead to a degree of a Recognised Body (see https://www.gov.uk/check-a-university-is-officially-recognised).

**Qualifications**
Previously there were two parallel frameworks for HE qualifications of UK degree-awarding bodies, one that applied to Scotland and one that operates in the rest of the UK:

- The Framework for Higher Education Qualifications of Degree-Awarding Bodies in England, Wales and Northern Ireland (FHEQ)
- The Framework for Qualifications of Higher Education Institutions in Scotland (FQHEIS).

These frameworks were the principal national reference points for academic standards in UK HE. However, providers in England, who are no longer required to use the FHEQ, now have to meet the Office for Students' conditions of registration and align their qualifications with the OfS' sector recognised standards. These sector-recognised standards do not formally reference the QF-EHEA or the other frameworks in use across the UK. Consequently two tables, provided by the QAA on behalf of the UK and Ireland Qualifications Frameworks and Policy Group, are now provided for use within the HEAR to support providers to align UK qualifications with the QF-EHEA.

**Quality Assurance**
Academic standards are established and maintained by HE institutions themselves, using an extensive and sophisticated range of shared quality assurance approaches and structures. Standards and quality in institutions are underpinned by the use of external examiners, standards agreed and recognised by the sector, by the activities of the Quality Assurance Agency for Higher Education (QAA) in Scotland, Wales and Northern Ireland, by the Office for Students in England and in professional areas by relevant professional, statutory and regulatory bodies.

The sector standards are supported by the Quality Council for UK Higher Education, formed from partner organisations, providers and national HE regulators.

A cornerstone of quality arrangements across all four nations is the UK Quality Code for Higher Education. It is a key reference point in the quality approaches for Scotland, Wales and Northern Ireland

In England, providers need to comply with the Office for Students' Regulatory Framework and Conditions of Registration. Engaging with the Quality Code is voluntary for providers based in England, except for those providers reviewed against the Quality Code using the Educational

Oversight Review (EOR) method

**England**
The Higher Education and Research Act 2017 (HERA) drives the regulatory and legal requirements of HE in England. The legislation can be found at http://www.legislation.gov.uk/ukpga/2017/29/contents/enacted. This Act established the Office for Students (OfS) and gave it responsibility for regulating the English HE sector. Its primary focus is the student interest in its duty as a market regulator. The OfS is responsible for risk-based monitoring of indicators relating to the baseline quality and standards of provision. It maintains the Register of HE providers in England, and implemented a regulatory framework in February 2018: https://www.officeforstudents.org.uk/publications/ securing-student-success-regulatory-framework-for-higher-education-in-england/.

Degree-awarding bodies in England must be registered with the OfS and meet all ongoing conditions of registration in order to retain degree-awarding powers. The OfS has express powers to revoke degree-awarding powers for HE providers in England if conditions of registration are not maintained.

**Northern Ireland**
Funding for HE is directly provided by the Department for the Economy in Northern Ireland.

QAA has been commissioned by the Department for the Economy (DfE) to develop an enhancement-led quality review method for higher education in Northern Ireland.

The new review method will provide confidence to DfE, students, staff and the public in the quality of higher education provision in Northern Ireland, whilst supporting higher education institutions to enhance the quality of the student academic experience. The review method is being developed in collaboration with the higher education sector in Northern Ireland and QAA expects to produce a proposal paper on the new review method for DfE by September 2024.

**Scotland**
The Scottish Funding Council (SFC), a non-departmental public body, is the strategic body responsible for funding Scotland's teaching and learning provision and research. Scotland takes an enhancement-led approach to quality assurance with its Tertiary Quality Enhancement Framework (TQEF), which focuses on the whole student experience and its enhancement rather than on quality assurance alone. This is built on partnership and collective engagement between a number of bodies including the Scottish Funding Council, QAA Scotland, the National Union of Students (NUS), and Universities Scotland. The TQEF requires both rigorous institutional activity, using external reference points, and external review on a seven-year cycle, known as Tertiary Quality Enhancement Review (TQER.) Institutions must demonstrate how they meet the expectations of the Quality Code, which is confirmed as a formal part of TQER.

**Wales**
The Higher Education Funding Council for Wales (HEFCW) is the Welsh Government sponsored body responsible for regulating the Welsh HE sector. From 1 August 2024, HEFCW will be replaced by a new Welsh Government sponsored body, the Commission for Tertiary Education and Research which will be responsible for overseeing post-16 education and research in Wales. The QAA undertakes Quality Enhancement Reviews of regulated HE providers every six years under the Wales Quality Assessment Framework. For more information, see: https://www.qaa.ac.uk/reviewing-higher-education/ types-of-review/quality-enhancement-review.

The Commission will be working to the same 6-year cycle – arrangements with QAA to continue as they are for at least the next couple of years up to the point when CTER gain the powers to consider the option of appointing a designated quality body.

**Credit Systems**

A number of integrated credit frameworks operate within the UK: the Scottish Credit and Qualifications Framework (SCQF) and the Credit and Qualifications Framework for Wales (CQFW), both of which are underpinned by the same principles, such as the definition of one credit as 10 notional hours of learning.

The FHEQ is a qualifications framework, based on the outcomes represented by the main qualification titles; it is not an integrated credit and qualifications framework, nor does its use depend on the use of credit. Not all degree-awarding bodies in England use credit in the same way, therefore. Some may not use credit at all, and some may use the European Credit Transfer and Accumulation System (ECTS) to support student mobility within Europe and award ECTS points rather than UK credit. Nevertheless, credit is widely used by most degree-awarding bodies in the UK. An advisory Higher Education credit framework for England has been in use since 2008. The credit framework is written for HE providers in England as a description of the typical practice developed across the sector and to provide a reference point for those wishing to introduce or consolidate their use of credit. The SCQF and the CQFW are integrated credit and qualifications frameworks, which means that they specify minimum credit volumes and levels for qualifications. The SCQF embraces all educational sectors, with the FQHEIS as a constituent part; and the CQFW is a meta-framework for credit and qualifications in Wales, embracing all post-14 education and training, and treating the FHEQ as a constituent part. The credit arrangements in the FQHEIS/SCQF apply to all degree-awarding bodies in Scotland. All degree-awarding bodies in Wales have agreed to use the credit arrangements stipulated in the CQFW, in relation to the FHEQ.

**Admission**

UK HE providers determine their own admissions policies and the minimum entry requirements for each programme. For Bachelor's degrees, the minimum entry requirement is usually two or three General Certificate of Education Advanced-level (GCE A level) passes, as well as a minimum number of General Certificate of Secondary Education (GCSE) passes at grade C or above. These remain the most common form of entry qualification held by young entrants to HE. Other appropriate qualifications may also provide entry, e.g. the International Baccalaureate, the Welsh Baccalaureate, Scottish Highers, Advanced Highers, or qualifications at the same levels of the Scottish Credit and Qualifications Framework and Edexcel BTEC National Qualifications. The Universities and Colleges Admissions System (UCAS) tariff establishes comparability between different types of qualification across the UK using a points system.

The Access to Higher Education Diploma provides another route for mature entrants. Most institutions also welcome applications from mature candidates who have had appropriate experience but may lack formal qualifications, offering credit for prior study and informal learning acquired through work or other experiences (Recognition of Prior Learning (RPL)).

# Comparing Qualifications in the UK

The table compares qualifications across the UK, providing examples of major qualifications at each level. For more details, refer to the website given at the head of each column.

| Framework for higher education qualifications in England, Wales and Northern Ireland www.qaa.ac.uk | | Regulated Qualifications Framework for England and Northern Ireland www.ofqual.gov.uk www.ccea.org.uk | | Credit and Qualifications Framework for Wales www.cqfw.net | | Scottish Credit and Qualifications Framework www.scqf.org.uk | |
|---|---|---|---|---|---|---|---|
| LEVEL | | LEVEL | | LEVEL | | LEVEL | |
| 8 | Doctoral Degree | 8 | Vocational, Technical and Professional Qualifications | 8 | Doctoral Degree, Vocational Qualifications | 12 | Doctoral Degree, Professional Apprenticeship, Professional Development Award (PDA), Award |
| 7 | Master's Degree, Integrated Master's Degree, Postgraduate Diploma, Postgraduate Certificate in Education (PGCE), Postgraduate Certificate | 7 | Vocational, Technical and Professional Qualifications | 7 | Master's Degree, Vocational Qualifications, Postgraduate Certificate in Education (PGCE) | 11 | Master's Degree, Integrated Master's Degree, Postgraduate Diploma, Postgraduate Certificate, Professional Apprenticeship, Graduate Apprenticeship, PDA, SVQ, Award |
| 6 | Bachelor's Degree with Honours, Bachelor's Degree, Professional Graduate Certificate in Education (PGCE), Graduate Diploma, Graduate Certificate | 6 | Vocational, Technical and Professional Qualifications | 6 | Honours Degree, Vocational Qualifications, Professional Certificate in Education | 10 | Bachelor's Degree with Honours, Graduate Diploma, Graduate Certificate, Professional Apprenticeship, Graduate Apprenticeship, PDA, SVQ, Award |
| | | | | | | 9 | Bachelor's/Ordinary Degree, Graduate Diploma, Graduate Certificate, Graduate Apprenticeship, Technical Apprenticeship, PDA, SVQ, Award |
| 5 | Foundation Degree, Diploma of Higher Education (DipHE), Higher National Diploma (HND) | 5 | Vocational, Technical and Professional Qualifications, Higher National Diploma (HND) | 5 | Foundation Degree, Vocational Qualifications, Higher National Diploma (HND) | 8 | Higher National Diploma (HND), Diploma of Higher Education (DipHE), Technical Apprenticeship, Higher Apprenticeship, PDA, SVQ, Award |
| 4 | Higher National Certificate (HNC), Certificate of Higher Education (CertHE) | 4 | Vocational, Technical and Professional Qualifications, Higher National Certificate (HNC) | 4 | Higher National Certificate (HNC), Certificate of Higher Education (CertHE), Vocational Qualifications | 7 | Higher National Certificate (HNC), Certificate of Higher Education (CertHE), Modern Apprenticeship, PDA, SVQ, Scottish Baccalaureate, Advanced Higher, Award |
| 3 | Access to HE Diploma* | 3 | Vocational, Technical and Professional Qualifications, GCE AS and A Level | 3 | Welsh Baccalaureate Advanced, Vocational Qualifications, GCE, AS and A Level, Access to HE | 6 | Higher, Modern Apprenticeship, Foundation Apprenticeship, National Progression Award (NPA), National Certificate, PDA, SVQ, Award |
| *The Access to HE Diploma is regulated by QAA but is not part of the FHEQ | | 2 | Vocational & Technical Qualifications, GCSE at grade A*-C and grade 9-4, Functional Skills (England), Essential Skills Qualification (NI) | 2 | Welsh Baccalaureate National, Vocational Qualifications, Essential Skills Wales Qualifications, GCSE at grade A*-C | 5 | National 5, Modern Apprenticeship, SVQ, NPA, National Certificate, Award |
| | | 1 | Vocational & Technical Qualifications, GCSE at grade D-G and grade 3-1, Functional Skills (England), Essential Skills Qualifications (NI) | 1 | Welsh Baccalaureate Foundation, Vocational Qualifications, Essential Skills Wales Qualifications, GCSE at grade D-G | 4 | National 4, SVQ, NPA, National Certificate Award |
| | | Entry Level | Entry Level Certificate (sub levels 1-3), Functional Skills (England), Essential Skills Qualifications (NI) | Entry Level | Entry Level Qualifications, Essential Skills Qualifications | 3 | National 3, NPA, National Certificate, Award |
| | | | | | | 2 | National 2, NPA, National Certificate, Award |
| | | | | | | 1 | National 1, Award |

Please note that the Credit and Qualifications Framework for Wales incorporates the Framework for Higher Education Qualifications of Degree–Awarding Bodies in England, Wales and Northern Ireland (FHEQ); the Scottish Credit and Qualifications Framework incorporates the Framework for Higher Education Qualifications of Higher Education Institutions in Scotland (FQHEIS).

Information correct at time of printing – September 2020.