



**UNIVERSITY
CENTRE**
SOUTH DEVON

SHORT COURSE QUALITY HANDBOOK 2022-2023

Level 5 Photonics Systems Short Course

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1. Welcome and Introduction to Level 5 Photonics Systems Short Course.

1.1 Welcome statement

Welcome to your Short Course Quality Handbook (SCQH), this SCQH is designed to provide you with course related information both for before and during your studies. In addition to this SCQH our UCSD interactive website contains our online Handbook to support you which studying at UCSD. A link is available here [Student Handbook | University Centre South Devon \(ucsd.ac.uk\)](http://www.ucsd.ac.uk). It can also be navigated by going to www.ucsd.ac.uk and searching for student handbook. However, when reading the Student Handbook, please note that there is a distinction between guidance that is applicable for students on short courses versus full degree programmes. This may include access to specific funding, as well as student services.

This Level 5 Photonics Systems Short Course has been designed in partnership with employers. Therefore, successful completion of the short course will help you develop the knowledge, skills and behaviours that employers are looking for.

By studying at the UCSD you will be attending an academic institution that has national recognition as a leading provider of higher education.

All of the curriculum staff are both academic and engineering sector professionals. Therefore, they are able to ensure that your experience is both academically challenging and engineering sector relevant.

All of the UCSD and wider South Devon College staff are dedicated to ensuring that you receive the support you need to achieve.

Your voice is important and we pride ourselves on our ability to listen and thus enable you to influence your higher education experience.

We look forward to welcoming you to this engineering programme and ultimately celebrating your potential achievements.

1.2 Programme Management

| Role | Person | Email address |
|-------------------------------|-----------------|--|
| Personal Tutor and/or HE Lead | Robert Smith | robsmith@southdevon.ac.uk |
| Programme Coordinator | Ben Bryant | benbryant@southdevon.ac.uk |
| Higher Education Coordinator | Andrew Faulkner | andrewfaulkner@southdevon.ac.uk |
| Curriculum Head | Adrian Bevin | Abevin@southdevon.ac.uk |
| Assistant Principal | Steve Caunter | stevecaunter@southdevon.ac.uk |

1.3 Personal Tutor

Your personal tutor's role is to support your personal and professional development, develop your academic skills, manage student expectations, achieve positive student-staff communications, provide pastoral support and signposting, and monitor your wellbeing. They should be your first port of call for advice and/or direction for further support on academic or pastoral matters.

Your personal tutor is Rob Smith. Rob has over 30 years experience in various photonics and electronics contexts.

1.4 Tutoring at UCSD

UCSD's aim is to facilitate and promote positive student engagement in learning, wellbeing, academic success, and progression. This is coordinated through an integrated tutorial model:

1. Personal and pastoral tutoring to monitor students' wellbeing and support their personal development
2. An academic tutoring curriculum to support in the development of academic and employability skills and monitor your academic and professional progress
3. Professional services including the Student Support Hub team, library services, employability, academic standards and quality
4. The integrated tutorial model ensures all students have a personal tutor and scheduled tutorial support and are able to access professional study skills, wellbeing, disability and employability guidance from the HE Student Support Hub.

The tutorial curriculum and Personal Development is tailored for your course including consideration of the size of course, the hours that you are studying and the level of your course. Details will be provided by your personal tutor

Your personal tutor's role is to support your personal and professional development, develop your academic skills, manage student expectations, achieve positive student-staff communications, provide pastoral support and signposting, and monitor your wellbeing. They should be your first port of call for advice and/or direction for further support on academic or pastoral matters. However, your tutor may refer you to members of the Student Support Hub to provide specialist advice and information. See section [Student Support Hub](#) below for more information.

1.5 Course Contact List

Details of your course leaders and how and when they can be contacted are below. You can also view the profile of the teaching team within the curriculum area that your programme is based via this: [Technology | University Centre South Devon \(ucsd.ac.uk\)](http://Technology | University Centre South Devon (ucsd.ac.uk))

If you have any questions about the programme or your pastoral needs please contact your personal tutor.

If you have any questions about fees, funding or support from the university please contact university@southdevon.ac.uk

| Short Course Leader | Module | Contact | If part time days/hours that are worked |
|---------------------|--------|---------|---|
|---------------------|--------|---------|---|

| | | | |
|--------------------|--|---------------------------------|-----------------|
| Dr Philip Mitchell | Level 5 Photonics Systems Short Course | philipmitchell@southdevon.ac.uk | Tuesday morning |
| Rob Smith | Level 5 Photonics Systems Short Course | robsmith@southdevon.ac.uk | |

1.6 Preparing for your programme

At UCSD, we understand that degree level study can be for some a big step up from previous studies. To help prepare you for the Level 5 Photonics Systems Short Course we recommend engaging with preparatory activities. Each year UCSD organise Stepping up to HE workshops, with a focus on supporting you to develop your research and writing skills, alongside academic techniques.

For more information on the workshops and resources available, please visit our website: <https://www.ucsd.ac.uk/the-first-year-at-university/>.

The Student Support Hub is available throughout the duration of your course and offers a range of services, acting as a first port of call for academic, study, wellbeing, disability, fees/funding, employability and progression support. If you then progress to the next level of higher education study, there are also workshops and activities available to support you with progressing your skills.

1.7 Curriculum design principles

Programme Rationale

The need for this course was requested by a local photonics business who are members of the Torbay Hi-Tech cluster. The course content and delivery model was developed in collaboration with this business. The University Centre South Devon using its foundation degree awarding powers approved the course for delivery. The first cohort of learners started in February 2022 and all came from the business.

The course can be accessed face to face at the University Centre South Devon. The course can also be accessed synchronistically on-line using Teams.

The course is being offered as both an assessed and non-assessed (attendance only) course. Learners who complete all elements of the assessment will be awarded with 20 academic credits at Level 5. Learners who do not complete the assessed elements will receive a certificate of attendance.

Context

The short course has been designed and is delivered alongside employers. The expectation is that most of the learners on the course are working in the electronic and photonics sector. Feedback from learners is used to ensure the content remains current and the delivery method is adapted to support diverse learner needs.

Content

The short course content develops the knowledge to be able to design a photonics system. The methods of assessment enable learners to communicate their designs using both verbal and written forms of communication.

The course is offered on a part time basis for half a day a week (February – June 2023).

Being able to access the course face to face or synchronistically using teams as either assessed or non-assessed is innovative and provides significant learner choice.

Teaching and Learning Strategy

In 2017, UCSD was awarded 'Gold', the highest level possible, by the Teaching Excellence Framework, which recognises outstanding teaching within our university-level curriculum.

Lectures, seminars, tutorials, practical's, guest speakers and workplace visits will be designed to facilitate students understanding and application of the causality of engineering theory and practice. Students will be supported in their studies with a personal tutor and access to the Higher Education study support services provided by the University Centre South Devon.

Formative learning, draft and summative assessments and feedback will support students to achieve the short course outcomes. In accordance with the College Teaching and Learning

framework, informal assessment and feedback will also be used within all scheduled teaching and learning activities. Students will be encouraged to provide regular feedback on their learning experience using both informal and College wide planned feedback mechanisms.

Resources

You will be provided with Reading Lists in your Short Course Guide

You will have access to the following across our campuses:

- 1,200 computers
- 25,000 books
- Campus-wide wireless network
- A comprehensive catalogue of e-books, journals, newspapers and electronic resources
- A virtual learning portal
- A student email address

The new and innovative £17 million Hi Tech & Digital Centre provides a visionary facility for higher education, towards ever-expanding hi tech, manufacturing, digital and creative sectors across Torbay, South Devon and wider regions. Some of your teaching may take place in the Hi Tech and Digital Centre which has specialist facilities including:

- Manufacturing, 3D printing and precision machining workshops.
- Materials testing suite.
- Programming logical controls (PLC) and electrical suite.
- Computer-aided design (CAD) suite.
- Kao/Hockham Electronic and Photonics Training Suite.

1.8 Assessment and feedback strategy

Assessment of your learning is an essential part of attaining your qualification. Your assessments will be design in accordance with the UCSD Assessment Policy <https://www.ucsd.ac.uk/student-life/essential-information/academic-regulations-and-procedures-and-policies/> and the assessment guidance on the UCSD website <https://www.ucsd.ac.uk/student-life/support/assessment-guidance/>

Your module leaders will support you to develop the skills to succeed in your assessments. But you can also use the self-directed guidance on <https://www.ucsd.ac.uk/student-life/support/assessment-guidance/> and receive one-to-one support from the HE Study team by contacting HEstudy@southdevon.ac.uk

Your assessment timetable will be available on Moodle at the start of your course.

Your assessment timetable will be available on Moodle at the start of your course.

Assessments are design to enable students to meet the learning outcomes of the course.

Assessment of learning outcomes is guided by the UCSD assessment policies and affords students the opportunity to undertake two summative tasks: a presentation and written report. The course requires an overall pass mark of 40%. Assessment briefs are published as part of the short course guide ahead of the commencement of teaching. Each assessment brief outlines how students can meet the learning outcomes through the assessment task, including a breakdown of what is expected, the marking criteria for the assessment task and the generic grading criteria.

The assessment methods ensure that specific students are not disadvantaged by specific forms of assessment, varying assessment activities has also helped develop a broader range of personal and employability skills. Student engagement is improved by using real life contexts in assessments which include case studies and/or linking to local industry to solve a problem. Staff will provide exemplar assessments, where appropriate, that allow students to visualise what the task is and independently or under direction to practise equivalent assessment tasks in advance of 'the real thing' and/or utilise these as formative tasks and discuss openly in taught sessions.

A range of formative learning activities are included throughout the learning materials to enable students to assess their progress, areas of strength and further development needs. Draft submissions and tutorials are planned into the scheme of learning to discuss assessments in a full and detailed approach. Students typically receive written feedback on their draft submission, verbal feedback during their draft tutorial, and generic feedback of common themes identified during the draft tutorial period.

Summative coursework submissions are via Turnitin. This allows students the opportunity to submit their assessment and receive similarity report feedback, thereby enabling them to develop the integrity of their academic writing for final summative submission. Practical assessments are marked in the moment, but a Turnitin submission of a reference list or presentation slides enables all feedback to be given via Turnitin for a consistent assessment feedback experience.

All assessment briefs are internally moderated and available to External Examiners before they are distributed to students, and all assessment marking is internally moderated in line with the

UCSD policy before summative feedback is released to students. The annual programme monitoring alongside early/end of course reviews allow staff to monitor the success of assessment type against learning outcomes. Student involvement in course and assessment reviews, helps monitor inclusive practice. Assessment audits enable the team to carry out and share good practice. All assessments will be subject to a rigorous moderation process both internally, and where required by University regulations, externally. Assessments will be reviewed annually through Cluster Programme Meetings with input from students via reviews and programme level student data.

1.9 Student Support Hub

The University Centre South Devon (UCSD) is committed to an ethos of equality and inclusivity. How we will support you is set out in the Student Development Policy, available on the UCSD website <https://www.ucsd.ac.uk/student-life/essential-information/academic-regulations-and-procedures-and-policies/>. By becoming a UCSD student you enter a partnership with us, committing yourself to positively engaging and actively taking part in scheduled learning activities, self-directed learning and alerting your teaching team and/or the Student Support Hub to any additional needs you have. In return we commit to support you to achieve your potential. This relationship is set out in our Student Charter <https://www.ucsd.ac.uk/student-life/essential-information/academic-regulations-and-procedures-and-policies/>.

The UCSD Student Support Hub <https://www.ucsd.ac.uk/student-life/support/> is based on the ground floor of the University Centre. Many students think that the Support Hub is only for when they have exhausted all other avenues of support. But we encourage you to seek us out as soon as you think that you are struggling, because it is much easier to solve issues when they emerge. Also, students may feel that they are expected or should be able to manage any difficulty, but it is better to contact us to discuss what we can support, rather than make that decision yourself. Therefore, all students are encouraged to contact the Hub team early in their student journey, the service is available year-round except for closure days (normally around Christmas, so that you can be supported to thrive:

- **HE Study Team**

The HE Study Team's role is to support you to develop your study and academic skills. You may have just progressed from a Level 3 course such as A' Levels, Access to HE, BTEC, or a Level 3 Diploma, or not have studied for many years, but everyone will find the step up to Higher Education learning a challenge and for some it will be more challenging we are here to support everyone. The team are here to support you to enjoy and make the most of your academic studies, that includes students who are doing well and want to do better and those for whom learning is more challenging. There is a wealth of resources on the UCSD website <https://www.ucsd.ac.uk/student-life/support/study-skills/> and you can book one-to-one sessions by emailing HEstudy@southdevon.ac.uk sessions can be held face to face or on MS Teams.

- **HE Disability Team**

If you have a disability or difficulty, whether that is physical, mental health or a learning difficulty, rest assured you will receive the support and assistance you need to study. You can contact us even if you are unsure that you might have a disability or difficulty as we are happy to have a chat about how you feel. Our team will guide and assist you from the initial enquiry, through the application and assessment process, and signpost you to additional resources and services where required. Find out more information on our website <https://www.ucsd.ac.uk/student-life/support/disability-support/> or visit the Government's website about Disabled Students' Allowance <https://www.gov.uk/disabled-students-allowance-dsa> If you are an apprentice student, you are entitled to the same support, but the application process is slightly different. The earlier you contact the team, the quicker the support can be in place, please contact HEdisability@southdevon.ac.uk

- **HE Wellbeing Team**

The Wellbeing team can provide support to students experiencing wellbeing challenges that

impact on their studies we understand that studies can face many difficulties so, don't be afraid to speak to us. The team offers urgent and regular support to help you adjust to and manage student life, stay positive and motivated, encourage you to continue with your studies, and manage the unexpected. Students who have mental health difficulties can apply for disability support to provide regular and specialist support. For more information see <https://www.ucsd.ac.uk/student-life/support/wellbeing-support/> or contact HEwellbeing@southdevon.ac.uk

- **HE Employability**

The Employability team are available to support you as your career plans develop. They can offer placement opportunities and help you to find appropriate work while you are studying. You can discuss your ideas, gain support researching opportunities, have feedback on your CV, personal statement or job application, and practice your interview skills. For more information see <https://www.ucsd.ac.uk/employability-and-next-steps/> or contact HEemploy@southdevon.ac.uk

Before you start your programme, you should engage with the Stepping up to Higher Education resources on our website <https://www.ucsd.ac.uk/stepping-up-to-higher-education/> and attend the workshops held by the HE Study team as these provide a detailed and useful introduction to your new academic life. There will also be a course induction by the programme team a week before teaching starts.

UCSD encourages all students to actively engage with their tutor and the HE Student Support Hub to access study skills, wellbeing, disability, and employability support throughout their studies. Make the most of the support available to you, so that you can gain the best degree.

1.10 Support for Employment, further academic study and personal development

This course has been developed through a collaboration between Lumentum and South Devon College. Therefore, it meets both the current needs of the electronic and photonics sector as well as the requirements of Higher Education academic regulations.

1.11 UCSD Enterprise and Employability Framework Mapping

| FHEQ level: 5 | | | | | |
|--|--|---|---------------------|--|--|
| Employability Criteria | Definition | Short Course Aims and Intended LOs | Assessment | Extra activity (i.e. trips) | Other UCSD areas of activity |
| Job-specific skills | Students demonstrate the specialist and technical knowledge and skills needed by employers (in the sector) locally and nationally. | UCSD2108. LO3 | Presentation Report | T | UCSD HE Study Skills support |
| General skills (aka. Transferable skills, 'soft' skills) | Students demonstrate the general knowledge, behaviours, and skills needed by every employer and workplace. | UCSD2108: LO1, LO2, LO3 | Presentation Report | Employer focused discussion and assessment briefs. | Engagement in UCSD Student Voice activities |
| Digital skills | Students demonstrate the essential digital knowledge, behaviours, and skills needed by employers. | UCSD2108: LO1; LO2; LO3 | Presentation Report | | Accessing SDC VLE, LRC etc Email and Teams |
| Practice and Experience | Students apply their knowledge and skills to specific career-relevant situations, and within career-relevant contexts. | UCSD2108: LO3 | Presentation Report | | SDC & UCSD Career Events |
| Careers Guidance | Students explore their knowledge, skills, and behaviours, in terms of their future, employment, and chosen career areas. | Majority of students already in employment. | | | UCSD Employability Support Personal Tutor Support |
| Enterprise | Students create ideas, set within practical situations, which lead to cultural, social or economic value. This can, | UCSD2108: LO3 | Report | Employer focused assessment briefs. | |

| | | | | | |
|--|---|-------------------------|---------------------|---|--|
| | but does not have to, lead to venture creation. | | | | |
| Personal Development | Students reflect on their identities, qualities, and values to better understand themselves, from which to make informed choices about future employment. | UCSD2108: LO1, LO2, LO3 | Presentation | Personal tutorial programme | UCSD HE Study Skills Support Personal Tutor support |
| Professional Behaviours | Students display the professional behaviours required of best practice and suitable for general employment. | UCSD: LO1, LO2, LO3 | Presentation Report | Encouraged throughout the short course. | Engagement with Personal Tutor and Programme Staff |
| Networking | Students have opportunities to grow and utilise personal networks of support for a wide range of career- and industry-related activities. | UCSD: LO1, LO2, LO3 | Presentation Report | Encouraged throughout the short course. | Linkedin |
| Employability is a vital part of the learning journey of all UCSD students and is integrated throughout the short course at FHEQ Level 5. As detailed in the UCSD Enterprise and Employability Framework, UCSD students develop their employability across nine criteria. This section highlights any other areas of activity, signposting, or links to industry and employer standards. | | | | | |

1.12 Student engagement in ongoing course development

UCSD sees students as partners in their academic process, we actively seek and respond to your feedback. Students are asked to give early and end of course review feedback to improve delivery. In addition, students can always discuss any concerns or areas of good practice with their personal tutor.

Below, we outline the recent feedback that has been received from students and how we have developed the course in response to that feedback.

| You said: | We did: |
|---|---|
| 2022 Course Review Written Feedback: Initial application/enrolment processes was weak. | 2023 Course: Application and enrolment processes have been modified. |

2. Course Specification

2.1 Course Details

| | |
|---------------------------------|---|
| Awarding Body: | University Centre South Devon |
| Delivery Institution | South Devon College |
| Accrediting Body: | Not Applicable |
| Mode of Study: | Part Time |
| Final Award: | Level 5 Photonics Systems Short Course (20 credits) |
| Intermediate Award: | Not Applicable |
| Course Title: | Level 5 Photonics Systems Short Course |
| UCAS Code: | |
| Date of Course Approval: | December 2021 |

2.2 Details of Accreditation by a Professional/Statutory Body (if appropriate)

Not applicable.

2.3 Course Aims

At the end of this course you will have developed an understanding of the:

- The commercialisation and development of photonic technologies, components & systems.
- International Telecommunication Union requirements for a photonic system and network.
- Optical fibre as a medium for optical transmission.
- Theoretical and practical aspects of the modelling and design of photonics components and systems.

2.4 Course Intended Learning Outcomes (ILO)

By the end of the course you will be able to:

1. Analyse the International Telecommunication Union requirements and how this has influenced the commercialisation and development of photonic technologies, components & systems.
2. Evaluate the characteristics of optical fibres and their applications within a photonics system.
3. Apply the theoretical and practical aspects of the modelling and design of a photonics system in a commercial context.

2.5 Progression Route(s) – what can you do next

Students who successfully complete this short course can apply to progress on to the FdSc Engineering (Photonic and Optical Electronics) Degree Programme.

2.6 Admissions Criteria

| Entry Requirements for the Level 5 Photonics Systems Short Course | |
|---|---|
| We consider a variety of qualifications and relevant experience, and each application is assessed on its own merit. | |
| Literacy Skills | Literacy skills can be evidenced with a level 2 qualification in English (GCSE grade 4 / C or above), or completion of a controlled entry assessment. If English is not your first language, you will need an IELTS score of 7.0 with a minimum score of 6.5 in each component (Reading, Writing, Listening and Speaking or an equivalent English Language qualification). |
| Vocational or academic experience | Evidence of successful study at Level 4 in Electrical Engineering or similar. |
| Criminal records | Students undertaking work experience or professional activity may be required to undertake a satisfactory DBS check. Criminal records should be positively disclosed upon application, in order for applicant suitability to be assessed. |
| Non-standard entry | Applicants with non-standard entry qualifications will be considered on the basis of relevant work experience and attainment of skills, which demonstrate an ability to study at this level. This may include an interview. Students with non-standard qualifications may also be asked to complete a controlled entry assessment on a relevant subject as part of the selection process. |

2.7 Applicable Policy, Procedures and Regulations

| Policy/Procedure/Regulation | Provision | Comments |
|--|----------------------|-----------------|
| Regulations | UCSD | |
| Terms and Conditions | UCSD | |
| Fee Policy | UCSD | |
| Admission Policy | UCSD | |
| Academic Complaints Policy | UCSD | |
| Service Complaints Policy | UCSD | |
| Code of Conduct and Disciplinary Policy | UCSD | |
| Fitness to Study/Study and Wellbeing Review Policy | UCSD | |
| Academic Offences Policy | UCSD | |
| Extenuating Circumstances Policy | UCSD | |
| Academic Appeals | UCSD | |
| Assessment Policy | UCSD | |
| Other – please stipulate | | |

3. Module Records

SECTION A: DEFINITIVE MODULE RECORD. *Proposed changes must be submitted via the HE Faculty Office Procedures for approval and issue of new module code.*

MODULE CODE: UCSD2108

MODULE TITLE: Photonics Systems

CREDITS: 20

FHEQ LEVEL: 5

HECOS CODE: Optoelectronic engineering 101069

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: No.

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

This module is designed to enable students to learn about the design of photonics systems and application within modern telecommunication networks.

| ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment | | | | | |
|---|--|--------------------------------|-----|-----------------------|-----|
| E1 (Examination) | | C1 (Coursework) | 75% | P1 (Practical) | 25% |
| E2 (Clinical Examination) | | A1 (Generic assessment) | | P2 (Practical) | |
| T1 (Test) | | | | | |

SUBJECT ASSESSMENT PANEL to which module should be linked: Engineering

Professional body minimum pass mark requirement: NA

MODULE AIMS:

This module aims to develop students understanding of

- The commercialisation and development of photonic technologies, components & systems.
- International Telecommunication Union requirements for a photonic system and network.
- Optical fibre as a medium for optical transmission.
- Theoretical and practical aspects of the modelling and design of photonics components and systems.

ASSESSED LEARNING OUTCOMES:

At the end of the module the learner will be expected to be able to:

| Assessed Module Learning Outcomes |
|---|
| LO1: Analyse the International Telecommunication Union requirements and how this has influenced the commercialisation and development of photonic technologies, components & systems. LO2: Evaluate the characteristics of optical fibres and their applications within a photonics system. LO3: Apply the theoretical and practical aspects of the modelling and design of a photonics system in a commercial context. |

| | |
|---|---|
| DATE OF APPROVAL: 14/12/2021 | AWARDING BODY: South Devon College |
| DATE OF IMPLEMENTATION: 02/2022 | SEMESTER: All Year |
| DATE(S) OF APPROVED CHANGE: XX/XX/XXXX | |

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Framework for Higher Education Qualifications
<http://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf>
- Subject benchmark statements <https://www.qaa.ac.uk/quality-code/subject-benchmark-statements>
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)
- QAA Quality Code <https://www.qaa.ac.uk/quality-code>

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

ACADEMIC YEAR: 2021/22

NATIONAL COST CENTRE:

MODULE LEADER: Dr Phil Mitchell

OTHER MODULE STAFF: Rob Smith, Dr Adrian Boatwright

Summary of Module Content

- History of Optical Networks
- Telecommunication standards
- Concepts of transmission
- Optical fibres
- Lasers as optical transmitters
- Discrete optical modulators
- Optical receivers
- Optical amplifiers and multiplexers
- Dispersion compensation and management
- Bit error rate
- Advanced modulation schemes
- Photonics integrated circuits

| SUMMARY OF TEACHING AND LEARNING [Use HESA KIS definitions] | | |
|--|--------------|---|
| Scheduled Activities | Hours | Comments/Additional Information (briefly explain activities, including formative assessment opportunities) |
| Lecturers | 60 | 4 hours a week for 15 weeks |
| Guided Independent Study | 140 | Directed weekly reading, moodle based tasks, and assessment development/revision. |
| Total | 200 | (NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.) |

SUMMATIVE ASSESSMENT

| Element Category | Component Name | Component Weighting |
|-------------------------|---|----------------------------|
| Practical | Presentation on the development of photonics technology. LO1. 10 minutes. | 25% |
| Coursework | Report on the application of photonics systems. LO2 and 3. 2500 words. | 75% |

REFERRAL ASSESSMENT

| Element Category | Component Name | Component Weighting |
|-------------------------|---|----------------------------|
| Practical | Presentation on the development of photonics technology. LO1. 10 minutes. | 25% |
| Coursework | Report on the application of photonics systems. LO2 and 3. 2500 words. | 75% |

To be completed when presented for Minor Change approval and/or annually updated

Updated by

Date:

Approved by:

Date: