DE MONTFORT UNIVERSITY LEICESTER

Exchange Student Module Choice Handbook

Faculty of Computing, Engineering and Media

2020-21

Faculty of Computing, Engineering and Media
Exchange Student Module Descriptions

2020-21

Incoming exchange student modules are offered in the following subject areas:

Computing

Creative Design

Engineering

Film Studies

Journalism

Media

Music

Module choice guidance

Incoming exchange students normally choose to study **30ECTS (60 DMU credits) per semester**. When choosing modules, please check that your choice will provide the number of ECTS credits required in your Learning Agreement and are approved by your home institution. In some cases, a student can select fewer courses, but they must be on a full-time programme of study whilst at DMU. Other key details to note include:

- Incoming exchange students should follow the same programme of study at DMU as they do at their home university.
- Level 5 means year 2 of undergraduate study, and Level 6 means year 3 of undergraduate study.
- The listed programmes are indicative and subject to availability
- Some DMU subjects require a portfolio of your work to be submitted as part of the application process (see below).
- All module choices are subject to the approval of the programme leader for the area of study, and will be confirmed in the Learning Agreement.
- All module choices are subject to Timetabling constraints.

Please note that the majority of DMU modules are for the full academic year (FY) (September to April), and students currently are only able to choose to study on exchange at DMU in Term one (selecting S1 modules only) or for a full year (FY).

Portfolio submission

Applications for the following programmes will also be required to submit a portfolio. You may wish to start preparing and collating your portfolio items at the earliest opportunity. Nominated students will receive instructions regarding how to submit their portfolio.

- Animation
- Game Art
- Graphic Design

Credit conversion

DMU module credits	Full year exchange (FY)	Term 1 exchange (S1) (Sept - Dec)
60	30 ECTS credits	15 ECTS credits
30	15 ECTS credits	7.5 ECTS credits
15	7.5 ECTS credits	3.75 ECTS credits

Term dates (teaching)

Term	Start	End
Term one	Monday 5 October 2020	Friday 18 December 2020
Term two	Monday 11 January 2021	Friday 26 March 2021
Term three (revision and exam period	Monday 19 April 2021	Friday 2 July 2021

The DMU undergraduate academic calendar for 2020-21 can be found here.

English language requirements

All modules are delivered in English. Applicants should be at 6.0 IELTS standard Arts, Design and Technology subjects and 6.5 for Business and Law, Social Sciences and Humanities subjects. We require a proof of any qualification demonstrating a minimum of level B2 according to the Common European Framework.

Faculty of Computing, Engineering and Media

Exchange Student: indicative list of module titles

Computing

Computing

Code	Module title	DMU Credit	Duration
CTEC2122	Forensic and Security	30	YL
CTEC3110	Secure Web Application Development	15	S1
CTEC3423	Digital Investigations	15	S1
CTEC3426	Telematics	15	S1
CTEC3605	Multi-Service Networks 1	15	S1
IMAT3406	Fuzzy Logic and Knowledge Based Systems	15	S1
IMAT3423	Systems Building: Methods	15	S1
IMAT3430	Project Management (Prince 2)	15	S1
IMAT3104	Database Management and Programming	15	YL
IMAT3404	Mobile Robotics	15	YL
TECH3015	Multimedia 3	30	YL
TECH3022	Social Media Practice	30	YL
TECH3025	Creative Image Production	30	YL
TECH3026	Creative Media Entrepreneurship	30	YL
IMAT3424	Systems Building: Management	15	S2
IMAT3613	Data Mining	15	S2
CTEC3606	Multi-Service Networks 2	15	S2

Creative Design

Code	Module title	DMU Credit	Semester
GRDN3301	Major Negotiated Pathway Projects	60	YL
GRDN3302	Creative Competition Projects	30	YL
GRDN3303	Applied Professional Practice Studies	30	YL

Engineering

Engineering

Code	Module title	DMU Credit	Semester
ENGD3001	Advanced Digital Design	30	YL
ENGD3005	Communication Networks	30	YL
ENGD3016	Solid Mechanics	30	YL
ENGD3021	Mobile Communication	30	YL
ENGD3025	Power Electronics And Generation	30	YL
ENGD3036	Plant Analysis and Sustainability	30	YL
ENGD3038	Dynamics and Control	30	YL
ENGD3045	Electrical Transmission & Distribution	15	S1

ENGD3036	Electrical Transmission & Distribution	15	S2
ENGD3051	Advanced Embedded System	15	S1
ENGD3052	Model Based System Integration	15	S2

Film Studies

Film Studies

Code	Module title	DMU Credit	Duration
FILM3401	Cult Film	15	S1
FILM3403	Filmmakers	15	S2
FILM3404	The Past on Film	15	S2
FILM3406	Hollywood Now!	15	S1
FILM3408	Documentary	15	S1

Journalism

Journalism

Code	Module title	DMU Credit	Duration
JOUR3001	Practical Journalism 3	30	YL
JOUR3003	Magazine Publishing	30	YL
JOUR3012	Arts and Entertainment Journalism	30	YL
JOUR3501	Sports Journalism	15	S2

Media

Media

Code	Module title	DMU Credit	Duration
MEDS3402	Paranormal Media	15	S1
MEDS3403	Future Media	15	S1
MEDS3404	Film Exhibition and Consumption	15	S2
MEDS3405	Sport and Media	15	S1
MEDS3512	Gender and Television Fictions	15	S2
MEDS3513	Global Advertising Practices	15	S2
MEDS3514	International Public Relations	15	S1
MEDS3515	Global Dissent	15	S2
MEDS3516	Women, Politics and Media	15	S1
TECH3011	Studio Technology	30	YL
TECH3013	Radio Location Production	30	YL
TECH3015	Multimedia 3	30	YL
TECH3018	AV Production	30	YL

Music

Music

Code	Module title	DMU Credit	Duration
MUST3021	Advanced Creative Projects	30	YL
MUST3023	Music, Media and Community Arts	30	YL
MUST3024	Final Project	30	YL
MUST3026	Composing with Dance	30	YL
MUST3028	Installation Art	30	YY

Faculty of Computing, Engineering and Media: Module Descriptions

Computing

Module Title: Secure Web Application Development
Module Code: CTEC3110
Semester: Semester 1
DMU Credits: 15
Leader: Clinton Ingrams

Module description: Many modern computer services are now accessed via the ubiquitous web-browser, and users have come to expect instant and secure access to information on a wide range of platforms. Underpinning these web systems is usually a web application, providing a channel to data stored in databases. However, increasingly the web-site has also become a point of entry for unauthorised access to stored data. This is often the result of poor web application design and/or implementation.

The module considers how a web application may be designed and implemented in such a way as to reduce the likelihood of unauthorised access to information. This also requires an understanding of the more common forms of browser-based attacks and the coding techniques that can be used to defend against these.

The module also considers how information can be accessed and presented from remote sources via web-service protocols.

The most commonly used web development language, and therefore the language of choice for the module, is PHP, although this could be replaced by other web development languages such as Scala, Ruby or Python.

Module Title: Telematics
Module Code: CTEC3426
Semester: Semester 1
DMU Credits: 15

Module description: Telemetry is the use of a transmission system to monitor and control remote and distributed systems. The transmission medium may be wired, such as a CAN network as used in most modern vehicles. Or it may be wireless, employing GSM (mobile phone) technology, Bluetooth and similar RF based data communications media. This module provides an understanding how distributed telematic systems are designed and implemented. This will include a detailed study of a range of telematic standards and protocols. Students will gain the skills to develop telemetry software for use in the automotive sector, and as part of a wider pervasive network of intelligent distributed computers that are linked by wireless technology.

Outline content:

1. CAN Networking, with emphasis on vehicle telematic systems using the J1939 protocol, and knowledge of industrial protocols such as DeviceNet.

2. Application of GSM technology for remote monitoring and control. Specific emphasis will be the use of SMS (PDU and Text mode), GPRS and dial-up connections to

transfer data.

3. 3. Application of BlueTooth technology for wireless monitoring and control. Specific emphasis will be placed on gaining an understanding of the BASIC HCI protocol that underpins BlueTooth, and some higher level applications.

Module Title: Multi-Service Networks 1
Module Code: CTEC3605
Semester: Semester 1
DMU Credits: 15
Leader: Ali Al-Bayati

Module description: The module provides a comprehensive analysis of problems and solutions found in modern networks and covers the communication stack (Physical, Data-link and Network layers). The module concentrates largely on the TCP/IP networks while the subnet covers recent and emerging developments in LANs, MANs and WANs, for both fixed and wireless network technologies. The Internet will be used as the driving vehicle to deliver the module. Familiarity is assumed with the basic concepts, but not necessarily the detail of data communications and the mechanisms by which a communications subnet transfers data segments between remote machines.

Typically, these will have been studied in Year 2 modules but this is not a pre-requisite. The module does have a strong software and algorithms orientation. Cisco technologies (Cisco Routers and Switches and Cisco Packet Tracer) will be used within the labs and tutorials.
The following give the major topics which will be covered in the module:

- Consolidation of existing Skills & Knowledge: Introductory material, Various Error detection and correction methods e.g. Cyclic Redundancy Check (CRC), Sliding Window Mechanism.
- Subnet Delivery Issues: Addressing, Routing, IPv4 and IPv6, MAC switching and Address Resolution Protocol (ARP); Routing protocols/Algorithms (RIP, OSPF)# Other Layer 3 protocols, IPv6, DHCP, NAT.
- End-to-End Delivery Issues: Delivery and Delay, Network Reliability, Interpretation & Transparency and Security. 4. PPP and Ethernet as examples of layer 2, WAN and LAN protocols, Virtual LANs (VLAN) and Port Security/Sticky Ports.

Module Title: Fuzzy Logic and Knowledge Based Systems
Module Code: IMAT3406
Semester: Semester 1
DMU Credits: 15
Leader: Archie Khuman

Module description: This module deals with, arguably, the two most successful techniques in the area of artificial intelligence. Fuzzy logic is a technique for modelling uncertainty and imprecision and appears in many applications for example in consumer products such as washing machines and camcorders. The ideas behind fuzzy logic use the notion that the world is not precise and that the ability to model words like hot, tall and expensive is very difficult using conventional mathematical techniques.

The student will gain an understanding of fuzzy sets and how these are used in systems that contain fuzzy if-then rules for decision making. Knowledge Based Systems (KBS - also known

as expert systems) are the most commercially successful technique in AI. These systems are analogous to data base systems except instead of storing data the use knowledge from an expert(s) to make decisions. Students will learn about the history of KBS as well as the various aspects of KBS development such as knowledge acquisition, inferencing, knowledge representation and system development. In summary, this module exposes the students to two highly successful methods for modelling expertise in decision-making environments.

Module Title: Systems Building: Methods
Module Code: IMAT3423
Semester: Semester 1
DMU Credits: 15
Leader: Gosia Plotka

Module description: This module covers an important aspect of Information Systems Development (ISD): the selection and evaluation of methodologies used in the Systems Development process. A variety of ISD paradigms and methodologies will be considered, including ‘hard’ approaches, both Object-Oriented and Structured, ‘soft’ and participative approaches, and ‘heavyweight’ and ‘agile’ methodologies. A framework will be developed to compare and evaluate methodologies to help determine their applicability to particular development projects and environments. The way in which methodologies are used in practice will also be considered.

Indicative topics:

- Information Systems Development (ISD): a review of major concepts, lifecycles, definition of a 'methodology', the factors influencing methodology use.
- Frameworks for methodology evaluation.
- Object-oriented methodologies, e.g. (Rational) Unified Process.
- Structured methodologies, e.g. SSADM.
- The development from 'heavyweight' to more 'agile' approaches, e.g. DSDM, XP.
- 'Soft' methodologies, e.g. Soft Systems Methodology.
- Participative approaches, e.g. DSDM, ETHICS.
- Integrated approaches, e.g. Multiview.
- Specialist applications and their methodology requirements, e.g. Web Information Systems
- Issues concerning the introduction of and use of methodologies, including standards for secure and trustworthy software design (BS PAS 754).
- Ethical aspects of ISD.The emphasis throughout will be on the comparison and evaluation for specific contexts of the methodologies covered.

Module title: Project Management (Prince 2)
Module Code: IMAT3430
Semester: Semester 1
Credits: 15
Leader: Ann Lawlor

Life cycle model applicable to projects will be examined, including traditional, evolutionary, prototyping and DSDM models. The generic life cycle model of 4Ds: Define, Design, Do and Develop will be central in the module in conjunction with analysis of real-world projects. Defining a project, or requirements analysis in systems development, uses assumptions,

standards and experience, which will be explored. Inputs and the products of each stage of projects managed by stages will be examined, following the seven principles of PRINCE2:

- Manage by stages
- Manage by exception
- Learn from experience
- Focus on products
- Ensure there is a continued justified business case
- Ensure there are assign roles and responsibilities
- Make sure the method is tailored to the environment the project is operating in.

Design of a project is a key role of a project manager. Estimates and the need to take account of risks and likely changes will be incorporated in planning projects. This follows PRINCE2 themes:

- Use a Business Case
- Change will happen and is natural so allow for it
- Organisation is important
- Planning is central to good project management
- Progress needs to monitored and taken account of
- Quality of the product needs to be assured
- Risks are always present and affect plans and quality, so recognise them.

Standard tools and techniques to project management will be demonstrated, such as work breakdown structures (WBS), activity lists, activity planning, precedence diagrams, bar charts, milestones, deliverables and appropriate team sizing. Visualisation of project plans and project management techniques will be developed, such as cascade activity numbering and cascade bar charts. The issue of overlapping activities will be considered as well as software tools including: spreadsheets, drawing packages or project management software (e.g. MS Project).

The role of the project manager in teams; typical group and team structures; qualities and skills of managers; team dynamics; leadership and management qualities will be investigated. This will include delegation and how to give project instructions, as well as self-assessment, psycho-metric tests related to team working and working styles as related to project management. Conflict management and working styles will be investigated to look at management and leadership broadly and flexibly. In planning a project, estimates of effort, time and manpower, and their appropriate units, need to be considered. Parametric cost modelling for software will be looked using three systems (Constructive Cost Model, Putnam and Mk II Function Point Analysis). Constraints will be investigated using activity lists and bar charts for allocating resources efficiently. Levelling resources, as well as calculating float from start and finish times of activities and the critical path will be demonstrated. There will be an introduction to risk assessment techniques, control and contingent risks, triggers and analysis by risk zones and actions which require modifications to plans. Quality is affected by risk so quality control will be addressed through ideas of what measuring quality and planning for quality really means and the value of quality assurance reviews, design walkthroughs and inspections. Finance is a resource so various ways of dealing with financial accountability will be investigated: cumulative cost and earned value and cost-to-complete as well as other issues of cash flow and discount cost factors. The Project Manager's project administration will be covered: project documentation, reviews, configuration and change management, following the PRINCE2 product requirements of projects to have four types of strategy management documents: Communications, Configuration, Risk and Quality. Report writing will be introduced.

Module Title: **Data Management and Programming**
Module Code: IMAT3104
Semester: Yearlong
DMU Credits: 30
Leader: Peter Bounds

Module description: Contemporary organizations, whether in the commercial or not-for-profit sectors, rely on effective database management systems (DBMSs). With the increased reliance on databases for business intelligence and operation, the acquisition of the skills of advanced database design and implementation are more essential than ever for the competent computer professional. The collection of data worldwide is growing at an exponential rate with organisations, such as in the retail, social networking and scientific sectors, requiring extremely big databases, which require increasingly more storage capacity. The variety of new data, as new products come on the market, is increasing too. Large data centres throughout the world are being built to hold clusters of many thousands of servers to satisfy demand. A variety of alternatives to the traditional relational database management system has been created to work more efficiently and effectively with these big datasets and cluster computing. This module enables the student to evaluate and compare these different non-relational (NoSQL) databases such as document, graph and column databases. Based on modules studied in previous years involving databases and computer programming, this module provides the student with further training on the essentials of advanced database management and programming, developing the student's ability to differentiate between relational databases and non-relational databases. It develops the skills to choose a suitable database for an application from a business perspective to meet stated requirements using realistic scenarios and the ability to analyse semi-structured data and to choose an appropriate storage structure. It develops skills in database design and data retrieval using a variety of complex data structures and NoSQL programming including aggregation methods. In addition, the module considers advanced concepts and database theory such as concurrency and recovery, ACID properties, distributed database systems, replication, sharding and the CAP theorem. It is important to understand these concepts in order to choose the most appropriate database for an application and to understand the implications. The module builds on the concepts and practical work undertaken in a module such as IMAT1215, IMAT2428 or CTEC2701, which concern relational database design and implementation. It is assumed that students will already have a good knowledge of relational database design, SQL and programming skills.

Module Title: Mobile Robotics
Module Code: IMAT3404
Semester: Semester 2
DMU Credits: 15
Module Leader: Pamela Hardaker

Module description: This module builds on the material covered in Introduction to Artificial Intelligence (AI) to provide a detailed understanding of autonomous mobile robotics and intelligent autonomous agents. The aim of the course is to extend the student's knowledge of the software issues in controlling autonomous mobile robots.

This module introduces students to a wider range of sensor processing and behaviour-based architectures for mobile robots. It will cover issues related to the sensing, representing and modelling of the environment, including some algorithmic solutions. Also covered are reasoning and planning. Advanced issues such as adaptive behaviour and social (group) behaviour of robots may also be discussed. A practical approach is taken using real robots

to explore some of the important ideas in robotics such as path planning and obstacle avoidance.

- Sensing and locomotion
- nonvisual sensors and algorithms
- Introduction to computer vision and image processing
- Feedback Control
- Binary control systems and hysteresis Proportional control
- Proportional-Integral-Derivative Behaviour-based architectures
- subsumption architecture motor schemas
- architectural design issues
- Perception and representation
- Odometry systems
- Mapping
- Representing space with discrete and continuous models
- Adaptive behaviour
- Learning behaviours
- Q-Learning

Module Title: Multimedia 3
Module Code: TECH3015
Semester: Yearlong
DMU Credits: 30
Module Leader: Thom Corah

Module description: Students will typically have an intermediate knowledge of HTML, CSS, and JavaScript to a level where they are comfortable creating web content from scratch that includes mixed-media and interactivity.

The module introduces advanced techniques in multimedia production for both Internet and mobile formats. Appropriate Multimedia Authoring software will be used to demonstrate advanced animation and multimedia techniques. Topics covered include:

- Integration of sophisticated Media User Interfaces and navigation schemes
- Dynamic control of video, sound, graphics and text in web-based productions
- Design and evaluation of designs using prototyping
- Usability testing and the evaluation of user feedback throughout the development cycle
- Dynamic user interfaces for media presentation using scripting languages such as JavaScript
- Backend systems for persistent data storage
- Intermediate to advanced concepts int.
- Game production for the web

Assessment: Practical 1 (40%); Practical 2 (60%)

Module Title: Social Media Practice
Module Code: TECH3022
Semester: Yearlong
DMU Credits: 30

Understanding the culture of social media, and how people make sense of the products of this culture in meaningful ways, is essential for future media producers who wish to engage with emerging and dispersed communities of interest, emerging communities of association, and with emerging communities of practice.
This module gives learners the opportunity to practice and develop their social media research skills, social media development skills, social media production skills and an academically oriented conceptual comprehension to an advanced level. This module explores how social media is made sense of and practiced as a technically mediated social phenomenon, offering learners the opportunity to explore critically how social media communication is articulated, understood and experienced by people living in socially mediated lifeworlds.

The underlying principles of investigation used in this module are: online sociological investigation, netnography and symbolic interactionism. These concepts and methods of investigation form the essential methodological underpinning necessary to study the practice and culture of socially mediated community life. Learners will be able to practice their social media production skills, and gain experience in the systematic development of social media projects, based on a conceptually relevant and flexible approach to social media production, circulation and interaction principles, as they relate to the DIY concept of distributed media production, digital activism, and collaborative forms of production management. This module gives learners the opportunity to develop their social media production skills by designing and creating social media projects that utilise creative and alternative forms of media, such as online video, podcasts, blogs, social networks, transmedia and technical interactivity.

Assessment: Portfolio 50%, Report 50%.

Module Title: Creative Image Production
Module Code: TECH3025
Semester: Yearlong
DMU Credits: 30
Module Leader: Anna Smalley

Whilst there are similarities between emerging imaging technologies within many different fields of technology, there are also significant differences in how they are acquired, processed and eventually displayed. This module will explore the necessary tools, technology and techniques required to investigate a variety of photographic topics.

The module curriculum consists of such elements as fundamental imaging theory, including lenses and light, DSLR camera techniques, and studio lighting. Historical photographic techniques and trends and their relevance to the modern, digital world and case studies of famous photographers and their work are typically considered. Applied imaging technologies such as time lapse, high speed photography, and High Dynamic Range (HDR) imaging are explored, and processes such as image workflow involved in the acquisition, post-production and display of different imaging technologies, health and safety and methods of presenting work are examined.

Assessment: Portfolio 40%, Practical 60%

Module Title: Creative Media Entrepreneurship
Module Code: TECH3026
Semester: Yearlong
DMU Credits: 30
Module Leader: Simon Walsh

This module is designed to inspire and develop an independent understanding of entrepreneurship, enterprise, creativity and entry-level best practice for working in the independent commercial media industry. Central to the module is the theme of how to monetize your creativity. The work accomplished in the module will increase each learner's employability skills through experience and application within the independent creative media sector, whether this be freelance or as an employee. The learning program will encourage direct engagement with local and global arts, culture, media and creative industries. This will present learners with opportunities to gain valuable independent professional contacts and networking experience; and to explore, exploit and progress personal career pathways into commercial media.

Media produced for broadcast television, radio, film, apps and online websites requires producers to work to a high standard, demonstrating creative skill, technical ability, business acumen and professionalism. The aim of a professional media producer is to commercially exploit content that they create in the creative industries market place. This includes a wide range of media/programming content such as documentaries, dramas, reports, commercials, voice-overs, identity packages, sound and visual design and editorial features. Producers have to work effectively in a competitive business environment to win commissions, market and sell their skills, and to derive a sustainable income from their work. They also have to prepare themselves for employability more generally by addressing their production skillsets and presenting their work in networked environments to high standards.

The ethos of this module is experiential learning with practical work is given a strong emphasis. Media production skills are best learned within the context of a real project, working to the time scales and disciplines of commercial practice. Learners will negotiate and manage their own media production project, under the guidance and support of the tutor. Activities are learner-centred, and will determine the type of media that will be produced. Collaborative working is both encouraged and supported. There is a degree of flexibility in content types and production techniques deployed, so that individual needs are addressed most effectively.

Emphasis is given to personal-development and independent working. Learners will be expected to demonstrate an awareness and level of individual responsibility in developing media content material that may be potentially commissioned and disseminated publicly.

Assessment: Presentation 1: 10% Presentation 2: 20% Project 70%

Module Title: Systems Building: Management
Module Code: IMAT3424
Semester: Semester 2
DMU Credits: 15
Module Leader: Adebowale Owoseni / Geoff Payne

System development management is about the process of building and delivering a computer-based information system to a customer, whether internal or external to the organisation. To successfully do this requires proper planning: an analysis of the project, its potential as an

investment, the benefits and risks. The manager should be convinced that the project will succeed, is controllable, that resources will be forthcoming and should carry out planning (as detailed as possible) before accepting the brief. The importance of being able to balance the key project requirements of timescale, budget, quality and delivered functionality makes the project manager's role challenging. The success of a project depends on more than just technical issues; commitment from the users, 'ownership' of the system, effective communications, clear identification of benefits and managing the delivery of these – these and other 'softer' issues are often the key factors in determining success. Staffing issues (e.g. recruitment, training, motivation, team-building, leadership style) have major implications also for project success and will be viewed in the context of ISD. Indicative topics: - Project Planning. - Financial appraisal of IS. - Risk Management. - Software quality assurance. - Human assets of an IS project. - In-house implementation, outsourcing and software re-use. - System integration and configuration management. - Why do Software Projects Fail?

Module Title: Data Mining
Module Code: IMAT3613
Semester: Semester 1
DMU Credits: 15

Module description: Data is collected and stored in all different types of organisations - commercial, governmental, educational. Every day hundreds of terabytes of data are circulated via the Internet. Extraction of meaningful information and hidden patterns from data is critical for many business applications including marketing and security and many new areas of knowledge, including bio-informatics.

Data mining involves extracting meaningful information and knowledge from vast quantities of data, to help us to make informed decisions. Although data mining is still largely a new, evolving field, it has already found numerous applications. In direct marketing, data mining is used for targeting people who are most likely to buy certain products and services. In trend analysis, it is used to identify trends in the marketplace by, for example, modelling the stock market. In fraud detection, data mining is used to identify insurance claims, cellular phone calls and credit card purchases that are most likely to be fraudulent.

Data mining is fast becoming essential to the modern competitive business world. This module aims to review the methods available for uncovering important information from large data sets; to discuss the techniques and when and how to use them effectively. The module uses the data mining tool SAS Enterprise Miner. SAS is a comprehensive data management software package that combines data entry and manipulation capabilities with report production, graphical display and statistical modelling.

Module Title: Multi-Service Networks 2
Module Code: CTEC3606
Semester: Semester 2
DMU Credits: 15
Module Leader: Mustafa Kaiiali

When you click on an audio link in a Web page, how does the plug in get started and the sound start playing? When you send an email, how does it get delivered? How can you tell who an email really comes from? How can these diverse application services be delivered over the same network? This module aims to answer these, and other questions relating to networks. It introduces the major concepts that underpin the communication between remote

hosts and demonstrates how these are implemented in a TCP/IP stack.

The module provides a comprehensive analysis of problems and solutions found in modern networks and covers the communication stack (Transport and Application layers). The Networks module focuses exclusively on very high speed networks, which carry integrated multi-service traffic such as voice, video and data. A recurring theme is how the network can provide the necessary Quality of Service requirements for the various types of traffic. The recent and emerging developments in LANs, MANs and WANs, for both fixed and wireless network technologies, are considered and the role each of these can play in providing a suitable broadband intra/internet infrastructure is discussed. The protocols developed for each of these technologies is developed and contrasted with conventional connectionless TCP/IP architecture of the Internet. A recurring theme is how the network can provide the necessary Quality of Service requirements for the various types of traffic.

Creative Design

Module Title: Major Negotiated Pathway Projects
Module Code: GRDN3301
Semester: Yearlong
DMU Credits: 60

Module description: This project-based module is the principle means for students to test, apply and articulate the concepts and theories learned at levels 1 and 2 and to develop their personal creativity to a mature level. Essentially studio-based with minimal formal taught content, it provides the opportunity to explore and develop individual creative pathways under close tutor supervision.

The module also enables students to work to a design process that reflects external professional practice, from briefing to delivery. This could include - Identification and proposition of a design project/problem/path of enquiry - Research of client, audience/market/culture - Formulation of a design brief/investigation strategy - Working to a negotiated written learning contract - Visual design, development, critical refinement and selection - Presentation of visual work supported by a substantial piece of written work, e.g. research report, brief, design report, reflective journal, etc.

This module allows students to undertake an individual project following a graphic design, illustration or interactive pathway, working on one or a combination of the following types of brief - individually chosen project brief, negotiated with module leader or tutor - national or international competition brief - externally commissioned project brief (to department, course or student). Students who undertake this module are expected to demonstrate a high level of self-motivation and personal initiative. They are responsible for selecting and organising the content of their study programme according to their individual interests, which may include design for both print and digital media in the areas of editorial publishing, typography, illustration, packaging, corporate identity, promotional, entertainment and information graphics.

With negotiated briefs, consultation and negotiation with academic staff ensures that, for assessment purposes, learning outcomes are clearly stated and reflect the intellectual rigour, creativity, knowledge and practical skills appropriate to visual communication practice at this higher level of first degree study.

Contextual studies are integrated with this module - students will undertake their advanced research project. This involves the student in writing an extended piece of work that might be linked closely with some aspect of their third year graphic design pathway projects. The aim is that skills of research, organisation, critical analysis and communication, along with an understanding of the relationship between theory and practice will be demonstrated in this piece of work.

Module Title: Creative Competition Projects
Module Code: GRDN3302
Semester: Yearlong
DMU Credits: 30

Module description: This module provides students with the opportunity to take part in national and international design competition - the RSA, D&AD, ISTD, YCN, etc.
Project-based modules are the principle means for students to test, apply and articulate the concepts and theories learned in earlier classroom-based modules. Essentially studio-based with minimal formal taught content, they provide the opportunity to explore and develop individual creative pathways under close tutor supervision. They enable students to begin to work to a design process that reflects external professional practice, from briefing to delivery.

Students who undertake this module are expected to demonstrate a high level of self-motivation and personal initiative. They are responsible for selecting and organising the content of their study programme according to their individual interests, which may include design for both print and digital media in the areas of editorial publishing, illustration, packaging, corporate identity, promotional and information graphics.

Students will be expected to be familiar with contemporary trends in graphic design applications relevant to their project.

During this module the students tackle two projects from the competition briefs on offer.
This module gives students the opportunity of focusing on graphic design and illustration issues in the context of a brief set by an external organisation. This requires that students deal with issues that are as close to real life as possible.

The module also provides students with a unique opportunity to focus on, and demonstrate understanding of the creative process.

Students can choose a brief from the competition list that reflects their graphic design or illustration pathway.

Module Title: Applied Professional Practice Studies
Module Code: GRDN3303
Semester: Yearlong
DMU Credits: 30

Module description: This module has three chief aims:

- to provide students with principles, knowledge and information on the professional practice of design
- to enable students to explore and articulate these through a creative design brief

- to produce an effective design outcome that is enhanced by a professional communications package.

This module introduces students to the basic knowledge and skills needed to understand graphic design, interactive design and illustration professional practice including knowledge of the commercial aspects of design practice.

Taught content is tested and articulated through an individual project following a graphic design, illustration or interactive pathway, working on a live, external brief. This will involve research directly linked to generating appropriate ideas for the practical design work and the preparation of the final presentation with support materials, to be assessed at the end of the module.

A range of project briefs is typically provided from the following areas:
- promotion and advertising ·branding and corporate identity
- information/instruction/interpretation
- entertainment ·editorial design and art direction

The module provides an introduction to the process of managing the client/designer relationship. Transferable skills relevant to the entire programme of study are developed through effective self-management of learning and through working with others in a team situation on the project.

The module presents an opportunity for students to develop a better understanding of the relevance of visual communication (graphic design, illustration, multimedia) to industry and in society. It emphasises the role of the individual design specialist within a working team and as a member of a larger community.

Lecture and seminar topics cover the following:
- modes of trading recognised by law
- agreeing and working to a brief
- professional business communication
- presenting a design proposal
- charging a client
- overheads and profitability
- career planning
- conducting meetings and working with others
- communication and presentation skills
- corporate social responsibility and ethical issues.

Engineering

Module Title: Advanced Digital Design
Module Code: ENGD3001
Semester: Yearlong
DMU Credits: 30

Module description: The module builds on the knowledge from previous modules concerned with electronic principles and digital electronics. Advanced Digital Design provides a review of the design philosophy in the light of using modern Electronic Computer Aided Design (ECAD)

tools for design, simulation and implementation. Programmable Logic Devices and Field Programmable Gate Arrays (FPGAs) are discussed.
Application Specific Integrated Circuits (ASIC) architectures / design routes are presented, together with an insight into the silicon technologies for semi/full-custom design. Algorithmic State Machines (ASMs) analysis, design and implementation techniques are discussed in detail.

The module presents major aspects of the modern top-down approach to VLSI circuit design, aiming to shorten the design cycle and to manage an increased complexity. VHDL (Very High Speed Integrated Circuit Hardware Description Language), a hardware description language largely used for IC design is introduced and discussed using practical design examples. Some IC testing techniques are presented. The module is assessed by an end examination together with a coursework component consisting of a computer demonstration and personal interview.

Module Title: Communication Networks
Module Code: ENGD3005
Semester: Yearlong
DMU Credits: 30

Module description: Students on this module will study the discipline of Computer Networks. The syllabus will be taught using the Internet as a model when appropriate to illustrate applications and techniques. The course will be based around the set book. Students are advised to contact the module leader before purchasing the textbook. This is because the literature is rapidly changing and students will be advised to purchase the most appropriate text available.

Module Title: Solid Mechanics
Module Code: ENGD3016
Semester: Yearlong
DMU Credits: 30

Module description: In this module student learns about mechanical behaviour of solid materials. It provides the student with an opportunity to study solid mechanics to an advanced level. The module objectives are; to further the students understanding of the principles of solid mechanics; to develop the student's understanding and confidence in the application of principles and therefore, develop in the student, the ability to analyse engineering problems involving strength of materials issues; to develop an understanding of FEA principles, focussing on 3D FEA, and to apply these using a commercial software package and to further develop the student's practical, experimental and measurement skills via a structured programme of laboratory exercises.

To correlate practical laboratory exercises with FEA solutions. The module is delivered through a combination of lectures, tutorials, seminars and a series of computer laboratory and mechanical laboratory based experiments. Assessment of the module is via examination, design report and laboratory reports. The laboratory exercises are designed to; give students confidence in using experimental procedures to validate theoretical results, train students to correctly use FEA techniques.

Indicative content:

- Stress systems, direct, shear and hydrostatic stresses. Axial and lateral strains.
- General stress-strain relations; torsional stress.

- Bending theory, direct stress due to bending; combined bending and direct stress; slope and deflection of beam.
- Plane stress and strain; principal stress and strain; stress and strain transformations; strain gauges and applications.
- Stress in pressurized vessels: thin and thick walled cylinders and spheres. · Buckling of struts and plates.
- Energy method: strain energy, Castigliano's first theorem of deflection.
- Theories of elastic failure.
- Principle of finite element analysis (FEA) and application.

Module Title: Mobile Communication
Module Code: ENGD3021
Semester: Yearlong
DMU Credits: 30

Module description: Mobile communication is as much a part of everyday life as TV and radio. However, mobile communications is a rapidly changing technology. This module focusses on these changes, particularly on how the technology is evolving to satisfy new needs and the shortcomings of prior art.

This is a technical course in that it unpicks these technological developments by analysing current and old mobile technologies and looks forward to upcoming technologies such as software defined radio (SDR) which are likely to form the basis of new generations of mobile communications infrastructure. As well as the technical information shared in this course, an additional aspect looks at determining trends in such markets and technologies by understanding quantitative forecasting techniques.

This module has a strong student-led focus. Coursework is undertaken as a number of research reports, where students have to research, define and carry out their own experimental investigations. Students will also be expected to lead seminars during the course.

Module Title: Power Electronics and Generation
Module Code: ENGD3025
Semester: Yearlong
DMU Credits: 30

Module description: This module introduces and gives the student an understanding of the field of Power Electronics frombasic switching power supply principles to modern vector-controlled motor drives. Renewable energypower conversion is also covered.

The module reflects the very wide knowledge base associated with the field of power electronics drawing on knowledge of power semiconductors, control, signal processing, DSP and embedded systems. The module will be delivered using formal lectures and tutorials, with the students working on laboratory experiments which form the basis for the coursework component of the assessment.

Module Title: Plant Analysis and Sustainability
Module Code: ENGD3036
Semester: Yearlong
DMU Credits: 30

Module description: This unit is designed to develop and to apply the students' knowledge of thermal plant analysis and energy technology on a basis of the efficient conversion and utilisation of energy and its relevance to sustainability.

- Steam turbine power plant
- Rankine cycle and reheat cycle · Psychometric and Theoretical and Practical Analysis of Air- Conditioning
- Cogeneration Plant and Combined Cycle Power plant
- SO2 removal
- Flue Gas Desulfurization Process
- Introduction to CO2 Sequestration and Carbon Trading Scheme
- Geometrical analysis of internal combustion engines (ICEs)
- Combustion theory and fundamentals in ICEs and other types of burners
- Fuels types and relevant stoichiometric chemical equations development
- Pollution analysis from combustion processes and methods of control.
- Brayton cycle with reference to power plant is covered in this part. In addition the basic designs of both compressor and turbine blading are studied.

The structure of a stage and their load sharing is explained briefly. Some basic aspects of loss generation mechanism and ways of reducing of these losses with a view to improving the efficiency is also studied. Self learning tutorial on compressor rotor design process.

Module Title: Dynamics and Control
Module Code: ENGD3038
Semester: Yearlong
DMU Credits: 30

Module description: The module builds on the material developed in the engineering sciences in earlier modules of the course. In particular, it further develops understanding of the fundamentals of vibrations and rigid body dynamics and their application to the analysis of a number of model engineering systems with projection on engineering design requirements.

The control part will focus on applying basic control principles to actively configure mechanical systems. This will cover theoretical aspects and practical implementation of PID controller for configuration of mechanical system to meet system requirements using linear and torsional ECP apparatuses. The module also considers basic principles of measuring instruments (sensors) and actuators.

Delivery of the taught material is illustrated with case study examples and practical applications where appropriate. The material is delivered via a structured programme of lectures, tutorials and practical laboratory exercises. Practice exercises are provided for self-directed study which are supported in tutorial sessions. The laboratory exercises are practical investigations aimed at supporting and reinforcing the understanding of mechanical and control principles and concepts as well as developing measurement, experimental and reporting skills. The module is assessed by an end examination together with a coursework component consisting of written laboratory reports and an assignment.

Module Title: Electrical Transmission & Distribution - I
Module Code: ENGD3045
Semester: Semester 1

DMU Credits: 15

Module description: Please contact Module Leader for further details

Module Title: Electrical Transmission & Distribution - II
Module Code: ENGD3046
Semester: Semester 2
DMU Credits: 15

Module description: This module builds upon the knowledge and skills developed in "Electrical Transmission and Distribution – I". Building upon the fundamentals of modelling power systems, detailed mathematical models for three-phase transformers and synchronous machines will be developed. Advanced admittance and impedance models will be developed along with advanced power flow techniques such as sparse matrix and optimal ordering of nodes in large networks, economic dispatch and fast decoupled load flow. IEEE standard networks will be used for analysis in lab sessions.

Short-circuit analysis including fault calculation, symmetrical components and sequence networks will be introduced with numerical examples. Topics covered in power system stability are: Swing equation, equal-area criterion, transient stability and voltage stability. Finally, HVDC (High Voltage DC) systems and FACTS (Flexible AC Transmission Systems) devices will be explored.

Lab sessions will involve power system analysis software and matlab/java for solving load flow and short circuit problems. The module is intended to be a companion to and run concurrently with ENGD3025 Power Electronics, which covers the mechanics of conventional and embedded power generation (synchronous generators and inverter-based generators). Assessment is by examination, a piece of coursework, and laboratory sessions with logbook.

Module Title: Advanced Embedded System
Module Code: ENGD3051
Semester: Semester 1
DMU Credits: 15

Module description: This module aims to extend the students understanding and awareness of advanced embedded system. The objective of this module is to provide level 6 students studying an engineering degree with an extended insight and understanding in modern embedded system.
The module will demonstrate the essential features of an embedded system and the use of microcontroller/microprocessor in realising innovative modern engineering design. The essential development methods and tools unique to the goals of the system developer will also be introduced. The role of system developer and its relevance to modern engineering will feature in terms of product design, machine design, and process design.

Outline Content:

- Microprocessors/embedded controller systems and related technologies for engineering system solutions.
- Measurements and errors. Feedback, analysis and simulation.
- Typical transducers, actuators and instrumentation.
- Development tools and software for microprocessor/embedded control based systems.

- Programming languages for microprocessor based systems
- The control of sensors, actuators and instrumentation utilising microprocessor based systems.

Module Title: Model Based System Integration
Module Code: ENGD3052
Semester: Semester 2
DMU Credits: 15

Module description: This module aims to create understanding and awareness of model based system integration, as students will need to understand the approaches and tools for system integration to prepare them for the future career. This will provide level six students studying an engineering or related degree with an insight and understanding into the Model Based System Integration (MBSI) methodology. This include application of the Model Based System Engineering (MBSE) and Model Based Design (MBD) methods and tools to the unique goals of the system integrator. Furthermore, the module will demonstrate the essential features of system integration and its application in realising innovative modern engineering design via a design study. The role of system integration and its relevance to modern engineering will feature in terms of product design, machine design, and process design.

Outline Content:
- Model Based System Integration and the Mechatronics design approach
- V Model of System Development Lifecycle
- Model Based System Engineering with SysML
- Requirement Engineering - Translating User Requirements to Engineering Specifications
- System Modelling and Simulation
- Model Based Design with MATLAB & Simulink
- System Evaluation and Validation
- Case Studies of model based system integration

Film Studies

Module Title: Cult Film
Module Code: FILM3401
Semester: Semester 1
DMU Credits: 15

Module description: This module studies the emergence and cultural significance of cult films - movies which are often transgressive, marginal or drawn from genres such as horror, science fiction and exploitation, and which have attracted an especially devoted and vociferous fan base.

The module introduces the main theoretical and critical approaches that have been adopted in the study of cult and film fandom, and offers case-studies of key films such as Rocky Horror Picture Show and Blade Runner.

Module Title: Filmmakers
Module Code: FILM3403

Semester: Semester 2
DMU Credits: 15

Module description: This module offers students the opportunity to investigate in depth the films of one significant filmmaker, which is understood potentially also to include producers and screenwriters. Examples are Stanley Kubrick, Alfred Hitchcock, Hammer, Martin Scorsese, Powell and Pressburger, and Steven Spielberg.

The module sets the filmmaker within, on the one hand, social, cultural and industrial contexts (e.g. national cinema), and, on the other, wider theoretical issues such as the value of 'auteurism' to understanding a collaborative medium. Rather than textual analysis, the module focuses especially on analysing the filmmaker's 'career' and 'brand', reputation, significance, critical and popular reception and impact.

Module Title: The Past on Film
Module Code: FILM3404
Semester: Semester 2
DMU Credits: 15

Module description: The module gives students the opportunity to consider and study in depth the variety of approaches films have taken to representing history - or, more loosely, to telling stories, whether wholly fictional, or based on real historical figures and events, that are set in past periods, both recent and distant.

Via a range of case studies, the module seeks to expand students' awareness of the diversity of 'the past on film' and develop their detailed understanding of the diverse strategies and approaches (stylistic/aesthetic, representational and rhetorical) filmmakers have taken to constructing these 'cinematic pasts', including the importance of specialised creative personnel such as the production designer, as well as considering the commercial importance of period films/genres and their popularity with audiences.

Critically, conceptually and contextually, teaching will focus especially on the following: (i) questions of genre in relation to period films, and a clear understanding of specific period-film genres and the critical and descriptive terminologies and concepts used to describe and debate them (e.g. 'historical epic', 'costume film', 'heritage' and 'post-heritage' cinema, 'retro film'); (ii) critical debates and the politics of period/historical representation, including questions of cinematic value, class, gender, sexuality, aesthetics and pleasure as well as notions of historical 'authenticity' or accuracy; and (iii) audiences, 'taste communities' and fan reception.

This module draws on world-class research specialisms within the DMU Film Studies staff team, but has been designed flexibly so that the case studies taught (and the precise debates they raise) can be varied dependent on staffing.

Module Title: Hollywood Now!
Module Code: FILM3406
Semester: Semester 1
DMU Credits: 15

Module description: This module focuses on the current output of the major Hollywood studios, and invites students to refine their skills as commercial analysts. Every week students are required to read the trade press, view key releases, and to develop the skills to both

understand and evaluate how commercial film is affected by ongoing market developments.

The overarching goal of the course is to encourage students to achieve a clear conceptual and critical understanding of how the issues we have studied through a historical prism up until this point play out in the immediate present, and how media companies (in this case the Hollywood studios) respond to shifting market conditions. By the end of the module, students will have become skilled commercial analysts, with a rich understanding of the current media environment, and a refined ability to evaluate the relationship between marketing, funding, distribution patterns and other market developments.

Module Title: Documentary
Module Code: FILM3408
Semester: Semester 1
DMU Credits: 15

Module description: The module will be delivered by a weekly lecture introducing the week's key film screening. Discussion of each week's topic, informed by preparatory reading, will take place in seminars.

Journalism

Module Title: Practical Journalism 3
Module Code: JOUR3001
Semester: Yearlong
DMU Credits: 30

Module description: This module is the culmination of students' three-year examination of the practice of Journalism and the issues surrounding it. In this module, students will gather up the examples of their work published on multimedia platforms including digital, print and social media from their work experience and other journalism and start to build it into a portfolio.

They will also, normally in groups, work on producing a publication of their own. In building their experience students should continue to engage with ethical and moral issues in contemporary Journalism.

Module Title: Magazine Publishing
Module Code: JOUR3003
Semester: Yearlong
DMU Credits: 30

Module description: This module will explore the diverse world of magazine publishing, from high-profile consumer titles to the small, but market-leading business to business (B2B) publications.

It will cover all aspects of positioning a magazine, identifying and serving an audience, writing and designing journalism for a specific market, finance, production, marketing and distribution, both in print and digital platforms.

Module Title: Arts and Entertainment Journalism
Module Code: JOUR3012
Semester: Yearlong
DMU Credits: 30

Module description: Students will study the discipline of professional cultural criticism, using a range of examples of professional practice and commentary and criticism of that practice. Issues of quality and journalistic ethics will be explored using relevant literature.

Students will also be encouraged throughout their module to develop their own skills in cultural criticism by building up a portfolio of their own work on multimedia platforms including digital, print and social media across a range of critical functions and their own critical and evaluative skills through commentary and case study, drawing on pertinent examples and relevant academic and journalistic literature.

Module Title: Sports Journalism
Module Code: JOUR3501
Semester: Semester 2
DMU Credits: 15

Module description: This sports journalism module will build on the skills developed in JOUR 1000/1005, 1002, 2000 and 2002 as the discipline of writing news is integral to the writing of any sports report or sports news story. The module will heavily feature practical sports journalism skills on multimedia platforms including digital, print and social media and offer students the opportunity to critically engage with all aspects of modern sports writing.

Media

Module Title: Paranormal Media
Module Code: MEDS3402
Semester: Semester 1
DMU Credits: 15

Module description: The module applies a range of existing, key debates and methodologies within media and communication to the growing, popular genre of Paranormal Media. Students will critically examine a competing range of histories of production, policy, content and form across a range of international paranormal media.

Additionally they will develop discussion/scholarship skills regarding key established theoretical debates revolving around rational scepticism versus irrationality/ambiguity, historical and geographical contexts and internet discourse/representations of the paranormal.

Module Title: Future Media
Module Code: MEDS3403
Semester: Semester 1
DMU Credits: 15

Module description: This module will examine the core tenets and historical development of

cybernetics and explore the implications this has for media. In particular, the module will explore the importance of cybernetics for understanding key contemporary concepts such as communication, information, feedback, networks, cyborgs and modelling.

Additionally the module will enable students to understand contemporary media utilising concepts which have developed from cybernetic heritage as well as contextualise these in relation to work in other areas such as sociology, cultural studies and philosophy.

Module Title: Film Exhibition and Consumption
Module Code: MEDS3404
Semester: Semester 2
DMU Credits: 15

Module description: This module introduces students to the study of film exhibition and consumption with the focus on: the spaces of film exhibition and consumption - cinemas and the home; the changing technologies of film exhibition and consumption - celluloid, video, digital and the Internet; the distribution of film - programming and marketing; and film exhibition and consumption as a social practice - how films are consumed. The module will also utilise the Phoenix Square cinema and digital arts centre as a site of the changes in contemporary film exhibition and consumption.

Module Title: Sport and Media
Module Code: MEDS3405
Semester: Semester 1
DMU Credits: 15

Module description: This module examines the interdependent relationship between sport and the media. Against the background of the increasingly globalized media and sports industries, the module focuses on three broad areas: i) the political economy of media and sport, including the buying, selling and regulation of media rights to sporting events and/or competitions; ii) the relationship between sport, media and identity formations based on gender, race and nation; and iii) the consumption of sport and the role of audiences in the communication process.

Module Title: Gender and Television Fictions
Module Code: MEDS3512
Semester: Semester 2
DMU Credits: 15

Module description: What have women contributed to the production of television drama and sitcom? How have women (at the level of gender, class, sexuality, race and age) been represented within these genres? These are key questions which this module addresses by exploring British feminine-gendered fiction from the 1960s to the contemporary period.

Taking an historical approach, this module contextualises key shifts to women's positioning on both sides of the television screen in relation to broader cultural, economic and social change.

In so doing, this module explores feminine forms of British television fictions' negotiations and responses to feminism, post-feminism, neoliberalism, post-colonialism, broadcasting policy as well American quality dramas such as Sex and the City and Scandal.

Module Title: Global Advertising Practices
Module Code: MEDS3513
Semester: Semester 2
DMU Credits: 15

Module description: Global Advertising Practices is a 15 Credit module devoted to the study

of one of the central institutions of the contemporary world. The module will interrogate the basic marketing concepts and promotional strategies associated with advertising as a commercial and creative practice, introduced from an academic perspective and informed by critical theory, and delivered through assignments that bring together a mix of practical and theoretical enquiry. The goal is not to attain an exact 'balance' between practical and theoretical approaches, but to produce a form of critically informed, yet creative practice.

This aim will be attained through collective effort, with the emphasis on active student contributions. Students will be introduced to key theoretical approaches to the study of advertising and consumption using contemporary and historical case studies that relate to textual examples across a range of media forms.

In contrast to more theoretical aspects of the course, details of contemporary advertising practices will be studied with particular reference to product brand marketing, broadcast and online media, and to social and networked media and mobile and interactive platforms.
Outline Content: three 3/4 week blocs

Module Title: International Public Relations
Module Code: MEDS3514
Semester: Semester 1
DMU Credits: 15

Module description: This module develops the student knowledge and skills, which have been gained through the student of public relations in MEDS2010: Public Relations 1. The module aims to equip students with the critical public relations knowledge, which will allow them to explore and research the issues and debates affecting public relations and its practitioners such as ethics, gender, corporate social responsibility and impact on the news agenda.

Student engagement with subjects such as these will be considered within the context of the broader social, economic, political and economic changes, which can both affect and be affected by public relations practice.This module also applies the practice-based and creative skills learnt in MEDS2010 to industry situations and allows students to continue to refine their public relations writing, technical skills, planning and social media use through a major project in the final term.

Underlying the module will be an appreciation of PR's relationship to and location within the media and mediated culture and PR's role and practices in relation to media industries and cultures. There will also be space within the timetable to react to and discuss current events and to debate current issues, such as the moral and ethical dilemmas in public relations.

Module Title: Global Dissent
Module Code: MEDS3515
Semester: Semester 2
DMU Credits: 15

Module description: Global Dissent is a 15 Credit module devoted to the study of a highly visible (mediated) phenomenon - the re-emergence global social/protest movements. The module will address the growth and impact of these eruptions (both within the context of economic 'austerity', and with reference to social, cultural and historical manifestations of dissent), paying particular attention to the use of traditional and social media forms to

represent the goals of the protestors, and the process of individual and collective identification that accompanies this process.

The module will address the existence of both trans-national political movements and supposedly more 'subjective' forms of resistance, including campaign groups formed to fight all forms of discrimination (on the grounds of sexuality, disability, racism, etc.), and those devoted to recovering the public memory of past injustice.

Older formations share one outstanding feature with their counterparts in the 'new' protest movements: the fact that they articulate dissatisfaction with the current political system, and with those individuals and institutional groups often described as 'elite social actors'.

Module Title: Women, Politics and Media
Module Code: MEDS3516
Semester: Semester 1
DMU Credits: 15

Module description: This module examines the interdependent relationship between women, media and politics. The module variously focuses on four broad areas: i) The politically mediated representation of women ii) the history of feminist thought iii) the political relationship media and identity formations based on gender, race and class; iv) the extent to which women are politicised, marginalised, empowered, in and through media.

Module Title: Studio Technology
Module Code: TECH3011
Semester: Yearlong
DMU Credits: 30

Module description: Working in and designing audio recording studios requires understanding of a broad range of disciplines such as acoustics, psychoacoustics, electricity and electronics. All of these will have an impact on the quality of recorded sound. This module will teach students about the technology of and in the recording studio in order that they will be able to use such spaces effectively and contribute to their design.
Study of this module would benefit students with an interest in audio, music and multimedia.

Module Title: Radio Location Production
Module Code: TECH3013
Semester: Yearlong
DMU Credits: 30

Module description: In this module students will develop the experience required to work at a producer level within the broadcast radio industry.
Radio stations are characterised by a set of specific work-based practices, production methodologies, people management techniques and problem-solving approaches. These are based on an understanding of the regulatory and legal requirements of the UK broadcast radio industry; the process of creative practice and commissioning within the industry; and a knowledge and understanding of the processes by which audiences respond to station remits and programme formats.

Students will study the theory and practice of radio studio operation, the management of radio studio resources (including personnel and contributors), the use of radio studio technologies,

and the regulatory and legal frameworks related to professional standards within the UK broadcast industry. Students will experience live outside broadcasting, from location and technical recce, through to set up, transmission and post-broadcast derigging.

While the core focus within the module is technical production, students will be expected to complete a range of editorial processes and outputs. These include contact-building, story-sourcing, researching, scriptwriting and running orders, the execution of editorial content on-air, as well as the operation of social media platforms and podcast production, publication and promotion.

Module Title: Multimedia 3
Module Code: TECH3015
Semester: Yearlong
DMU Credits: 30

Module description: The module introduces advanced techniques in multimedia production for both Internet and mobile formats. Appropriate Multimedia Authoring software will be used to demonstrate advanced animation and multimedia techniques. Topics covered include:

- Integration of sophisticated Media User Interfaces and navigation schemes
- Dynamic control of video, sound, graphics and text in web-based productions
- Design and evaluation of designs using prototyping
- Usability testing and the evaluation of user feedback throughout the development cycle
- Dynamic user interfaces for media presentation using scripting languages such as JavaScript
- Backend systems for persistent data storage
- Intermediate to advanced concepts int.
- Game production for the web

Module Title: AV Production
Module Code: TECH3018
Semester: Yearlong
DMU Credits: 30

Module description: This module aims to bridge the gap between the sound recordist / designer and video content creator by introducing students with some audio pre-requisite knowledge to the principles of video capture, editing and sound track design for picture.

Building upon this, the latter half of the module will allow the student to explore the world of soundtrack design, 5.1 mixing and encoding, and multiple audio layer DVD authoring.

Music

Module Title: Advanced Creative Projects
Module Code: MUST3021
Semester: Yearlong
DMU Credits: 30

Module description: This module deals with applied and advanced creative work using digital technologies combined with appropriately focused theory and aesthetics. Practical work alongside self-directed study will lead towards the completion of a portfolio, which should demonstrate a sophisticated approach to the creative use of technology.

Portfolios may be directed toward specific themes or be guided by particular technological imperatives (e.g. music for dance, human-machine interactivity, improvisation, etc.). All creative projects must be approved by the individual tutor.

Module Title: Music, Media and Community Arts
Module Code: MUST3023
Semester: Yearlong
DMU Credits: 30

Module description: Theoretical and practical study of the role and development of music technology in the community. Practical experience is offered through a placement.

Module Title: Final Project
Module Code: MUST3024
Semester: Yearlong
DMU Credits:

Module description: You may take EITHER the Dissertation OR the Final Project module in your final year. These form a compulsory element in your Honours Degree. Each is worth 30 credits. MUST3000 and MUST3024 are to be considered of equal weight in terms of depth and sophistication of research, although the outcomes in which this is expressed will differ.
The Final Project involves the completion of a substantial portfolio of work through which students will develop contextual and analytical skills. It will comprise two elements:

- A practical project or portfolio of practical work which clearly demonstrates a research imperative. As a guideline, original electroacoustic or multimedia work should be of a total duration of not less than 20 minutes. In instances where duration is not necessarily relevant (e.g. object-oriented computer programming as a project element) the scope and depth of such work must be agreed and documented with the tutor, as part of the approval process.

- Supporting documentation in the form of an explanatory critical text of not less than 4,000 words. A requirement of this text is that it clearly articulates the research imperative of the practical work, and critically reflects on the practical work once completed.

Module Title: Composing with Dance
Module Code: MUST3026

Semester: Yearlong
DMU Credits: 30

Module description: This module provides the framework in which students will realise music with dance by working with a student choreographer under guidance from staff. It will be run in conjunction with DANS3512 Choreography for Performance. Projects may include video-based and/or live work.

Taught sessions will deal with topics such as preparing and developing a proposal; understanding the nature and structure of the relationship between music and dance, rehearsal & production planning and management, movement investigation and documentation; strategies for directing self and/or others. Students will develop musical ideas in conjunction with the choreographic process. Students will be required to engage in critical reflection and analysis.

Module Title: Installation Art
Module Code: MUST3028
Semester: Yearlong
DMUCredits: 30

Module description: This module involves the development of an appreciation of technical and aesthetic concerns pertaining the sound installation and their practical application via a series of installation projects which should demonstrate a sophisticated approach to the creative use of technology for this purpose.

The module will focus on the development of skills relevant to the musician producing installation work in a variety of contexts from gallery to public space using electroacoustic media. Critical areas to be covered include issues surrounding the history and conceptual evolution of the installation, site specificity, public art, sounding space, acoustic properties of structures, interactivity, intervention, sculpture and multimedia.

Other content may be determined by the interests of the students themselves and the demands of their projects, in particular practical and technical requirements (e.g. programming, electronics, instrument building and sculpture). Students will be expected to present work that aspires to professional quality both aurally and visually (i.e. the visual aspect of the outcome is important and must be considered). One project will be prescribed according to a brief set at the beginning of the year; the second project will be determined via a contract between tutor and student. Group work will need to be agreed with the tutor.