STAFFORDSHIRE
UNIVERSITY

Faculty of Computing Engineering and Technology

AWARD HANDBOOK 2011-12

PgC/PgD/MSc Electronic Engineering

PgC/PgD/MSc Electrical Engineering

PgC/PgD/MSc Mechanical Engineering

PgC/PgD/MSc Mechatronics

PgC/PgD/MSc Automotive Engineering

PgC/PgD/MSc Autosport Engineering

PgC/PgD/MSc Aeronautical Engineering

PgC/PgD/MSc Telecommunication Engineering

PgC/PgD/MSc Manufacturing Systems Management

PgC/PgD/MSc Renewable Energy Technology

Author: Professor David Cheshire
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1.   Welcome to the Faculty

Welcome to the Faculty of Computing, Engineering and Technology at Staffordshire University. You are now a student in one of the largest such faculties in UK universities, and we are delighted that you are one of our students. The faculty is host to one of the first UK university computing provisions, to technology programmes that are amongst the leaders in the UK, and to an engineering scheme founded on large engineering employer needs. Your course of study will therefore be up to date and appropriate, will be serviced by well qualified staff, and will also be geared to preparing you for life and employment after university. Staffordshire University aims to 'create the difference' by helping all of its students to achieve what they want to in life.

As one of our students we expect you to work hard, to set high standards for yourself. To help you to succeed you will have access to excellent staff and facilities, and also to a range of student support services to help deal with your particular needs. Of course, in addition the academic, administration and technical staff that you come across as part of your studies will also be delighted to advise and support you. Your part is to take your study seriously, to set appropriate time aside for your study, and to make full use of lectures and other scheduled class contact. It is important to us that you are successful and that you go on to be a good ambassador for the university.

You are now part of the Faculty 'family', and we look forward to working with you to help you to 'create the difference'!

Very best wishes,

Professor Michael J Goodwin
Dean
Faculty of Computing, Engineering and Technology

2.   Welcome to your Award

On behalf of all the staff who contributes to the MSc Engineering Awards I would like to welcome you to the MSc Engineering awards. I am sure you will find that all the staff in the Faculty are helpful and professional in everything they do. We will do our best to make you feel very welcome here. Please do not hesitate to contact the appropriate staff for any academic or personal matter.

As you will soon find out your learning will involve significant technical challenges which may well stretch your ability. Attending all classes and having a good work ethic both in class and in your personal studies will help you to succeed on this course and leave us as a fully fledged engineering professional ready to embark on a career leading to Chartered Engineer status.

But do remember to enjoy your time at University to! For many people, when they reflect back, their time at University is often the most fun, enjoyable and rewarding time of their lives. I hope it is for you!

Professor David Cheshire
Award Programme Manager: Taught Engineering Masters

3. Useful Contacts and Resources

3.1 Academic Contacts

Award Scheme Leader
Prof. David Cheshire
Location: C208
Telephone: 01785 353273
E-mail: d.g.cheshire@staffs.ac.uk
Role: overall management of the suite of taught masters awards

Individual Award Leaders
Electronic Engineering and Mechatronics
Dr Ian Taylor
Loaction: C201
Telephone: 01785 353210
E-mail: i.taylor@staffs.ac.uk
Role: management of the Electronic Engineering and Mechatronic Masters awards

Electrical Engineering
Professor Sarath B Tennakoon
Location: D102
Telephone: 01785 353488
E-mail: s.b.tennakoon@staffs.ac.uk
Role: management of the Electrical Engineering Masters award

Mechanical Engineering, Automotive Engineering and Autosport Engineering
Professor David Cheshire
Location: C208
Telephone: 01785 353273
E-mail: d.g.cheshire@staffs.ac.uk
Role: management of the Mechanical, Automotive and Autosport Engineering Masters award

Telecommunications Engineering
Dr Mohamad Patwary
Location: C336
Telephone: 01785 353546
E-mail: m.n.patwary@staffs.ac.uk
Role: management of the Telecommunications Engineering Masters award

Manufacturing Systems Management
David Link
Location: K334
Telephone: 01785 353284
E-mail: d.link@staffs.ac.uk
Role: management of the Manufacturing Systems Management Masters award

Renewable Energy Technology
Professor Tariq Al-Shemmeri
Location: C241
Telephone: 01785 353335
E-mail: t.t.al-shemmeri@staffs.ac.uk
Role: management of the Renewable Energy Technology Masters award

Aeronautical Engineering
Martin Fiddler

Location: C336
Telephone: 01785 353557
E-mail: m.l.fiddler@staffs.ac.uk
Role: management of the Aeronautical Engineering Masters award

Final Year Project Co-ordinator
Dr Ian Taylor
Location: C201
Telephone: 01785 353210
E-mail: i.taylor@staffs.ac.uk

The role of the project Co-ordinator is:
- Managing and overseeing the administration of all the projects
- Managing the allocation of projects to individual students
- Liaison with the examiners to collate the project interview report and thesis, for consideration by the External Examiner.

A full list of staff contacts can be found at
http://www.staffs.ac.uk/faculties/comp_eng_tech/current_students_and_staff/fcetwhoswho.jsp

Placements Academic
David Link
Location: K334
Telephone: 01785 353284
E-mail: d.link@staffs.ac.uk

The role of the Placements Academic Coordinator is:

- To assist the student in finding a placement (in conjunction with the Placements office).
- To assess the potential placement and to liaise with the company to ensure a sound process.
- To advise on all academic issues regarding the placement.
- To oversee and coordinate the optional Work Placement (WP) module.
- To organise assessments (which may be part of the optional WP module).

3.2 Administrative Contacts

Award Administrator
Ms Sally Brown
Location: K243
Telephone: 01785 3533294
E-mail: c.i.hanks@staffs.ac.uk

Student Guidance Advisors
Janice Kalisz
Location: K232
Telephone: 01785 353345
E-mail: j.c.kalisz@staffs.ac.uk

Rose Arnold
Location : K228 and B164
Telephone : 01785 353625 and 01782 294047
E-mail : r.e.arnold@staffs.ac.uk

3.3   Useful Internet Resources

The Faculty website can be found at: http://www.staffs.ac.uk/faculties/comp_eng_tech/ . Here you will find details of timetables, contacts and news regarding the Faculty.

The Faculty uses Blackboard as an online learning environment, and information on modules on which you are enrolled can be accessed from this. Note: you can only get access to those modules that you are studying – if you cannot gain access to material, it may be that you are not correctly enrolled on the module – make sure you let your module tutor or award administrator know.

Blackboard can be found at: http://blackboard.staffs.ac.uk

The library can be accessed from: http://www.staffs.ac.uk/uniservices/infoservices/library/

3.4   The Faculty Office

Faculty Reception is on the 2nd Floor of the Octagon, Room K266 and first floor of Brindley building in Stoke (B161) and should be your first port of call if you have any queries or problems relating to the Faculty or if you are unsure of how to deal with other queries. The contact details of the University Services for students are listed in Section 3.   The Faculty Office comprises a team of staff who are responsible for managing the wide range of activities and processes necessary to support students and academic colleagues within the Faculty. You'll get to know some of the staff quite well as it is here you'll hand in your module registration forms and assignments.

All enquiries should be made via the Reception desk in the first instance. The Receptionist will assess whether they are able to help you immediately or whether you need to talk to another member of the team. Hence they may call on colleagues who can advise on queries concerning:

- Modules
- University regulations
- Your credit and progression status
- Referral opportunities
- Claims for extenuating circumstances you may have made in relation to assessment
- Information about your study here: award and module records, local and home address information, etc
- Any changes to your award or programme of study
- Registration events for continuing study

It is important that you get to know staff in the Faculty Office as they are responsible for keeping all the information on your period of study accurate and up-to-date.

In particular, make sure that you:-

- Check your e-mail account regularly for any information or queries sent to you by Faculty/School administrators or by academic staff. This means your university e-mail account – not your personal one!

- Always let the Faculty Office know of any changes in your contact details. This includes mobile numbers as well as home and term addresses and any landline telephone numbers. It really is important that we know how to get in touch with you.

- Always ensure that the Faculty Office is aware of any changes you make to your academic profile (modules/award) by completing the appropriate module amendment/award transfer forms.

Opening Times

Monday - Thursday   8.45 am – 5.00 pm
Friday only   8.45 am – 4.00 pm

Please feel free to call into the Faculty Office between these times. All queries, no matter how small or large, are welcome as they ensure that your records are always correct – and this does prevent delays or difficulties in confirming results at the end of each Academic Year. And if you have a problem which the Faculty/School Office can't help you with, it usually knows somebody who can.

3.5   The Faculty Management Team

The Dean of Faculty

At the head of the Faculty is the Dean, Mike Goodwin (K260 Octagon, 01785 353295, E-mail m.j.goodwin@staffs.ac.uk)

In this role, Mike has responsibility for the strategic development, operation and management of the faculty. Should you need to speak with him, you should normally make an appointment with his secretary, Heather West. Heather can be found in Room K260, Octagon Building and her telephone number is 01782 353295 (E-mail h.n.west@staffs.ac.uk)

Faculty Academic Directors

Mike Goodwin is supported in running the faculty by 2 Faculty Academic Directors:

Dr. Mike Hamlyn, Teaching and Learning (C236, Beacon, 01785 353220, m.g.hamlyn@staffs.ac.uk)

Professor Adrian Low, Research and Enterprise (K252 Octagon, 01785 353307. a.a.low@staffs.ac.uk)

4.   What are the aims of the award?

4.1 General Aims

This award aims to produce postgraduates with the knowledge and skills relevant to the changing needs of their chosen industry. This award will enhance their career opportunities within industry or they may choose to further their academic development through postgraduate research for a PhD degree.

In summary the general aims of the courses are as follows:
- To further develop the student's intellectual and creative powers, their judgement and problem solving ability together with an ability to communicate in a professional manner and to see opportunities beyond a particular programme of study.
- To provide specific skills and knowledge in the use of technological tools for the solution of engineering design and analysis problems.
- To develop research skills by expecting students to search for, and understand, original solutions.
- To contribute to the matching section leading to chartered engineer status.

4.2 Named Award Specific Aims

PgC/PgD/MSc Electronic Engineering
This is an award for the graduate Electronic Engineer who wishes to broaden his or her knowledge base and become skilled in modern design techniques and be aware of new technological advances. The course provides coherent and up to date coverage of Electronic Engineering with modules in Analogue and Digital Systems, VLSI, Digital Signal Processing, Real Time Embedded Software and Telecommunications. The approach spans specification and design to realisation with particular emphasis on the application of industry standard CAD tools and DSP devices to develop solutions to practical engineering problems.

PgC/PgD/MSc Electrical Engineering
The advent of the Flexible AC Transmission Systems (FACTS) resulting from the application of power electronics to power systems is revolutionising the electrical power supply industry and there is a need for engineers skilled in Power Electronics and Power systems. The proposed MSc in Electrical Engineering is designed to fill this requirement and is unique in that at present no such course is offered by other higher education institution in UK. Staffordshire University is able to produce such a course due to the long history of research in this field with the support of the companies such as National Grid, Electricity boards, and Areva T&D.

PgC/PgD/MSc Mechanical Engineering
This is an award for the graduate Mechanical Engineer who wishes to enhance their knowledge of modern engineering simulation techniques and be aware of new technological advances. The course covers a broad range of areas related to Mechanical Engineering with modules in CAD, Reverse Engineering, Materials, Engineering Design Methodologies, FEA of Static and Dynamic mechanical systems, Thermodynamics, Energy conservation and Control Systems Design.

PgC/PgD/MSc Automotive/Autosport Engineering
This is an award for the graduate Mechanical Engineer who wishes to focus or Automotive related topics. This specialisation is understandable as automotive products have a very high profile in everyday life and we are all exposed to them through travelling by motorcycle, car, bus or coach. The course covers a broad range of areas related to Automotive Engineering with a choice of module in CAD, Reverse Engineering, Materials, Engineering Design Methodologies, FEA of Static and Dynamic mechanical systems, Vehicle Styling, Vehicle Aerodynamics, Vehicle Dynamics and Engine Design. The type of project undertaken for the MSc dissertation will determine the final award title.

PgC/PgD/MSc Mechatronics
The Mechatronics award has been designed to offer students a selected range of modules covering current practice in Electronic Engineering, Mechanical Engineering Robotics, Automation and Control Engineering. Areas available include Real Time Embedded Systems Programming, Robotics, Power Semiconductor Devices, Motors and Drives.
Students will have a flexible choice of modules allowing them to specialise in their particular areas of interest.

PgC/PgD/MSc Telecommunication Engineering
Telecommunication engineering award encompasses the design and optimisation of communication networks for voice, data and multimedia applications. This award will provide students with an in-depth knowledge telecommunication networks, project management and research methods. The modules covering in this award includes Voice-over IP telephony, wireless networks, Digital Signal Processing, Telecommunications, Wireless navigation systems, Optical fibre communications, along with Research Methods & Project Management.

PgC/PgD/MSc Manufacturing Systems Management
The Manufacturing Systems Management award is designed to produce the manufacturing managers of the future. This award will provide students with an in-depth knowledge of the principles and tools required of a manager of manufacturing systems in an applied manner.

PgC/PgD/MSc Renewable Energy Technology
Renewable energy is expected to be a major field of development over forthcoming years with wind, wave and solar power will make an increasing contribution to the supply of energy of developed countries. This award contributes to the knowledge of students in both the electrical and mechanical aspects of power generation and distribution.

PgC/PgD/MSc Aeronautical Engineering
This is an award for the graduate Engineer who wishes to enhance their knowledge of flight engineering whether it be for fixed/rotary wing or subsonic/supersonic. The course covers a broad range of areas

related to Aeronautical Engineering with modules in CAD, Reverse Engineering, Materials, FEA of mechanical systems, Aerodynamics, flight principles and power systems for aircraft.

5.   How is the award structured?

The named routes comprise three distinct components;

- A taught component consisting of 8 modules, each comprising 150 hours of learning time and allocated 15 credit points for each module.
- A major individual project of up to 24 weeks or 600 hours duration which is allocated 60 credit points.
- Optional industrial placement allocated 15 credits

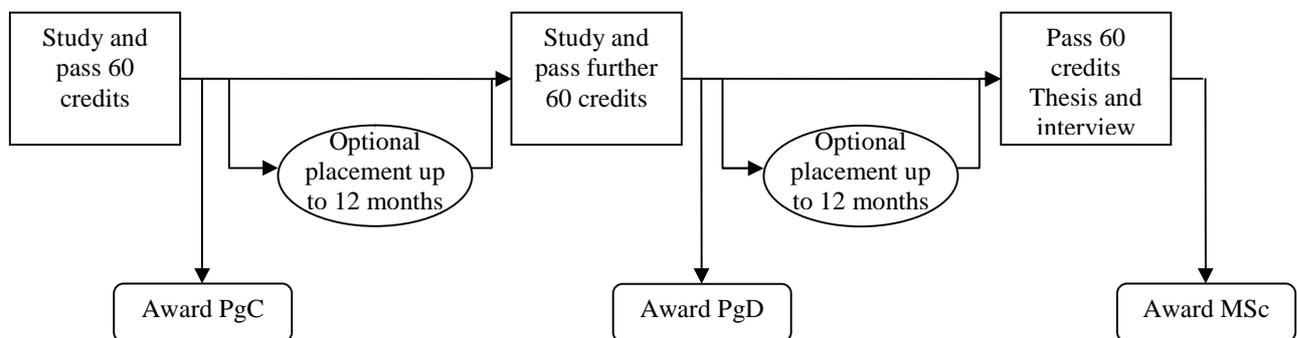Staged awards within a named route are illustrated in Figure.1.

Figure 1 : Illustration of Staged Awards within a Named Route.

5.1 Taught Programme

For full-time students the first element of the taught programme is four 150 hour modules each attracting 15 credit points delivered over a 12 week semester. Examinations for the first semester are normally held in January. After the examination period the second element of the programme will begin and consist of four, 150 hour modules each attracting 15 credit points and delivered over a second 12 week semester. Examinations for the second semester are normally held in May. The courses are structured to allow students to directly enter the course at either the start of Semester 1 (September) or Semester 2 (January) with no academic penalty.

5.2 Time Scales

The timing of the completion of the three elements of the Awards depends on your start date and the industrial placement which can be up to 15 months total. Guidance to the time scales are given in a table appended to this document.

6. How will I learn on this award?

6.1 Teaching and Learning Strategies

The taught part of named MSc awards consists of eight modules. Each module comprises 150 hours of student learning time. Typically, this would comprise 36 or 48 hours of timetabled class contact including formal lectures, tutorials, and laboratory based work. The remaining time is defined as student centred learning time and will normally be comprised of:

- Open learning approaches using commercial computer packages, commercial systems, and education material developed in house.
- Participation in broad-based design activities, involving both individual contributions and teamwork.
- Self managed study.
- Industrial visits
- Field trips

A typical weekly timetable for full-time students on the named awards will be typically 12 hours. We suggest that you work for a further 28 hours per week on self-study, assignments and report preparations. It is expected that part-time students will enrol for at least two modules in each year.

The award structure allows an industrial placement which must be taken before starting the project. Immediately after completing 4 modules you should start applying for placements. Express your interest to the placement office and your award leader. The placement office offers support in many ways including help in CV preparation and putting you in touch with companies. However you should take the initiative and look for opportunities. Internet, newspapers and technical magazines are good sources. If you do well and demonstrate your potential it is not difficult to secure a placement.

6.2 Module Assessment

Each module of the taught part of the MSc named award is assessed either entirely by In-Course Assessment (ICA) or by a combination of in-course assessments and a written examination. The ICA can take many forms; typical examples of ICA are laboratory and simulation based assignments, class test(s), group projects, assignments containing sample tutorial questions, and case studies. In all cases any physical documentation, written work, or computer based work must be handed in through the Faculty Office. The weightings of different assessment methods for each module are given on the appropriate module descriptors which can be downloaded from the university website. Each written examination paper is normally up to 2 hours duration and is designed to assess the module outcomes and provide the candidates with a choice of questions to answer.

6.3 Assessment Regulations

6.3.1 General

Assignments are essential features of the assessment process and are treated with the same formality as written examinations. An assignment timetable, listing the cut off dates for all assessed assignments, will be produced by the subject lecturer and distributed to students.
Written examination and class test papers are prepared by members of academic staff and moderated and approved by the Award Tutors and Postgraduate Awards Programme Manager. The assignments, the proposed papers, worked solutions and marking schemes are forwarded to the External Examiner(s) for approval. Examination scripts, project dissertations, and other in- course assessments are available for inspection by the External Examiner(s) prior to attending the meeting of the Assessment Board.

A candidate is deemed to have satisfied the assessment requirements for a module if he or she obtains at least 50% or grade point 7 of the possible aggregate marks as laid down in the assessment schedule for the module. On satisfying the Assessment Board the full allocation of credit points for a particular module will be awarded to the candidate.

In the case of borderline decisions that affect the progress of a candidate, or in cases where unforeseen circumstances have affected a candidates performance, the Assessment Board may take into account a report from the Personal Tutor and exercise its discretion to examine the candidate viva voce or by some other means.

At the end of the taught programme the Assessment Board may condone failure with grade point 4 and above in one module subject to overall performance.

6.3.2 Conditions for Referral

Candidates should refer to the University Regulations available on the Staffordshire University website.

Normally only one referral attempt will be allowed for any module unless the candidate is able to claim extenuating circumstances.

6.3.1 Appeals Procedure

Any appeal against results shall be dealt with according to the appeals procedures of the University.

7. How do I hand in assignments?

You will always be required to hand in written assignments relating to Faculty of Computing Engineering and Technology modules to the Faculty Office, either in the Octagon, Stafford, or Brindley, Stoke. Instructions for the submission of practical assignments will be included in the relevant module handbooks.

It is your responsibility to ensure that you submit assignments on time and at the appropriate place.

The Faculty Office is open to take your assignments at the following times:

Monday to Friday   8.45 am – 3.30 pm

ASSIGNMENTS WILL <u>ONLY</u> BE ACCEPTED DURING THESE HOURS.

Written assignments to be submitted to the Faculty Office should have stapled to them an *assignment receipt form*, available from the Office.

Please ensure that you fill in *all* sections, particularly the module title and tutor's name before coming into the Office to have it stamped; space is at a premium and the Office is very busy on assignment submission days, so do plan to submit your work in plenty of time.
Note that some assignments are marked anonymously, and that you are asked to fold and stick down the right hand flap of the assignment receipt form to conceal your name before handing in your work to the Faculty Office. This is an important tool in helping to safeguard the integrity of the assessment process. Anonymous marking, however, is usually confined to conventional essay type assessments, as with other kinds of assessment (for example, an artefact or presentation report or dissertation) the tutor would normally be aware of the author's identity.

If you have a problem with dyslexia, make sure that you ask for one of the yellow labels (available from your Award Leader/Personal Tutor or if at the last minute the Faculty/School Office) to attach to your work to signal to the tutor that the assignment needs to be marked on content and understanding rather than on syntactical and grammatical competence.

The form you will complete is in duplicate. It is most important that you use a biro so that both copies are marked. Having completed it go into the Office where a member of staff will date stamp and sign both copies of the form and return one copy of it to you.

KEEP THIS SAFE! IT IS A RECEIPT, WHICH YOU CAN PRODUCE TO SHOW THAT YOU HAVE SUBMITTED YOUR ASSIGNMENT.

We would normally expect you to hand in your work in person, but recognise that this may not always be possible. If you are unable to hand in your written assignments in person, you can submit them via the post, using recorded delivery. This is important as should your work not arrive, we need to be able to find out what happened to it. All work which is submitted in this way will be dated according to the postmark.

YOU SHOULD ALSO NOTE THAT <u>NO</u> WORK WILL BE ACCEPTED WHICH HAS BEEN SENT BY FAX OR E-MAIL.

Finally, it hardly needs to be said that it is always, of course, good practice to keep a hard or (backed up) electronic copy of any assignment you submit. Should the assignment you submitted get lost then you will have the receipt to prove that you handed it in and a copy to replace what has been lost.

8   Feedback on Your Work

The University's Academic Board has been considering the outcomes of the last National Student Survey and discussing how it can provide quicker assessment feedback to students. This guidance refers to summative (actual) rather than formative (practice) assessments. In relation to this, the following has been agreed:

Coursework and other assessments, excluding examinations

From September 2010, you will normally receive feedback on all your assessments, other than examinations, within 20 working days following the date of submission of your assessment or actual date of the assessment (in the case of class tests). For some assessments the feedback period will be less than 20 working days. However, it may be the case that the 20 day rule for some assessments cannot be met for justified reasons (for example, modules on which a large number of students are enrolled). However, it is anticipated that this will apply to only a small number of modules on your award and, in those cases, the feedback return period will not exceed 25 days. The anticipated feedback return times for all assessments will be published in your Module handbooks.

In order to ensure that feedback is provided within 20 days, in most cases, the marks for your work will be provisional and will be subject to final ratification by the appropriate Assessment Board in due course.

Formal University examinations

Feedback for examinations will always be provided and should be available as soon as possible after the relevant examination. Where appropriate, feedback on examinations at the end of the last teaching block in the final year should be provided in the form of generic, group feedback through the University VLE. At the latest, feedback should be provided at least four weeks before the next examination period.

The University hopes that you will also play your part by ensuring that you collect feedback from the relevant sources as soon as it is available.

9.   Personal Development Planning and Personal Tutoring

As with all awards within the Faculty students have the opportunity to take part on a PDP programme supported by "Pebblepad" a software tool which also allows the students to maintain a portfolio of their work which can be presented to prospective employers. PDP enables students to become more focused in approaching tasks, developing learning skills, and evaluating achievements objectively. By taking up the PDP opportunities offered the student will learn to become an effective planner and be able to complement this skill with sound evaluation and reflection skills. PDP is a vital part of the students development not only related to education but also in shaping a suitable career path to follow.

In addition, personal development planning is integrated into the module "Project Management & Research methods. Also personal development naturally happens through the MSc project. The project supervisor ensures that interpersonal skills such as communication, time management, forward planning are developed. In addition workshops are run on topics such as time management and report writing.

10.   Accreditation of Prior Learning

The Accreditation of Prior Learning is the term used when a student uses his or her previous experiences to gain admission to a programme of study; admission to a module; admission at an intermediate stage in a programme (advanced standing); or to gain exemption from part of a programme of study. These previous experiences may be work-based learning, general learning experiences (experiential) or certificated qualifications.

You should normally apply for exemptions or admission with advanced standing through the AP(E)L scheme when you apply for a place on the award, or immediately upon registration for your modules. You will not be allowed to apply for AP(E)L in a module once you have submitted any assessment for that module. If you apply for exemptions or admission with advanced standing through the AP(E)L scheme you may be required to undergo some assessment to determine the relevance of your experiences/qualifications.

The APL and AP(E)L forms can be obtained from the Faculty of Computing Engineering and Technology Office. The APL and AP(E)L Board meets in early October. It is chaired by one of the Faculty's Programme Area Managers and its purpose is to consider all the APL and AP(E)L applications received from students and uphold or reject these applications dependant on the evidence provided.

11.   Award Regulations

Your award is regulated by the Regulations for Postgraduate Certificate, Diploma and Masters Awards.

These can be accessed at : http://www.staffs.ac.uk/current/regulations/academic/index.php

An important new regulation for 2010-11 relates to referrals and resits on assessments.

Module Failure - what happens if I fail a module?

If you have failed to satisfy the assessment criteria of the module, you will be awarded a **fail grade** (Grade Points 3, 2, 1 or 0). If you have failed to submit any assessment for the module, you will be given a **Grade Point N** (Fail due to non-submission) for the element(s) of that module and you will only be allowed a further attempt at that element(s) of the module at the discretion of the appropriate Board.

If I fail a module, can I resit it?

(i)   **If you made an attempt at your assessments at the first attempt:**
You will only be guaranteed an opportunity to attempt referrals **once IF, and only if,** you have made an attempt at the assessment(s) on the first occasion unless a claim for Extenuating Circumstances has been successful.

(ii)   **If you did not make an attempt at your assessments at the first attempt**:

If you do not submit work or attend assessments at the first attempt, that guarantee of a referral is lost and the appropriate Board will decide whether or not to allow you a referral. In making its decision, the Board may take account of your engagement with that module.

If the Board does allow you a referral(s) and you do not take the referral(s) at the time notified to you by your Faculty/School, no further referral opportunity will be given to you and you may fail the award.

When can I take my resit(s)?

In all cases, if you are allowed a referral(s), the referral(s) must be taken at the next resit opportunity. For most students, this will be in August 2011 but will depend on the nature of the award and the timing of your assessments.

It is your responsibility to make sure that you know when you are required to resit.

12. Award Specific Regulations

You are required to gain at least 30% in each component of assessment, and get an aggregate mark of over 50% in order to pass a module.

At the discretion of the Award Board a maximum of 15 credits (30 credits for General Engineering) can be compensated if at least a grade point 4 has been achieved in the last assessment. Compensation will not be applied until progression on the award would not be possible without it.

You cannot progress on to the project module until at least 105 credits (seven modules) have been passed. You cannot undertake a placement once you have started your project.

13. Industrial Placements

There is an opportunity for a student to take an optional work placement before studying the project module. This is an additional part of the course and does not count towards your final mark however it will be looked on favourable by future employers. The placement must be taken before proceeding to the project. It is possible to take the placement in two parts so long as the total time does not exceed 15 months and you do not unnecessarily delay your academic studies. The placement office is in C012 Beacon. Staff in this office will help the student to secure a placement in many ways including help in CV writing and putting the student in contact with the companies. However the final responsibility in securing a placement lies with the student.

Key Contacts:

Ms Maria Feenan	Dr David Link
Placements Manager	Placements Academic
C012	K215
01785353257	01785353284
placements@staffs.ac.uk	d.link@staffs.ac.uk

14. Dissertation

This is the largest single component of the MSc scheme. It is a major undertaking of between 12 - 24 weeks or 600 hours duration and is credited with 60 credit points. A candidate will not normally be allowed to proceed to the project until he or she has passed the taught part of the programme. Under exceptional circumstances, at the discretion of the award leader variations to this condition may be allowed.

Students can propose their own project provided that supervision expertise and appropriate equipment to complete the work is available within the faculty or at a sponsoring company. Project selection and approval of a project are by the mutual consent of the Project Supervisor and the student. The proposed project must be capable of being pursued at an adequate academic and intellectual level to justify the MSc Award. Alternatively projects can be selected from lists provided by the Faculty at the start of Semester Two.

The student must fill a project registration form and submit to the MSc award administrator. At the time of registration the student must state the expected date of completion. The project registration form is attached to this document

The proposal, which is written under the guidance of the supervisor should clearly describe the project aims and objectives and demonstrate that progress has been planned in such a way that the objectives can be met. The proposal length should be approximately four to five A4 pages. Any students who extend their project submission beyond the normal time scale will be charged a re-enrolment fee.

The project proposal will be prepared by the student in consultation with the Project Supervisor. It should:

- Identify the project aims and objectives
- Include a project time schedule with milestones.
- Identify the resources needed for successful completion of the project
- Identify project outcomes
- Include the signatures of the student, the supervisor, and the employer wherever appropriate, to confirm the acceptance and commitment of all parties.

The signed project proposal should be lodged with the project coordinator who will appoint a moderator for the project.

The actual timing of the project depends on your start date and whether you take the optional industrial placement module or not.

Overseas students have the option to study the project in their home country so long as the supervisor agrees that all resources required are accessible and it will not disadvantage you. In this case the MSc Project by Distance Learning module will be taken. Regular contact with your supervisor will still be required and communication medium such as Skype can help facilitate this. If this option is chosen it will be recorded on your final transcript and may be seen as detrimental by some employers.

14.1 Dissertation Assessment

A project assessment interview will take place at the end of the project period, following submission of the dissertation. The membership of the project assessment panel will normally consist of:

- The Project Supervisors
- If appropriate an external representative, such as the employer
- The External Examiner. If the External Examiner is not present at the interview, the thesis, together with the interview panel's comments and recommendations, will be forwarded to the External Examiner for approval.

When examining the candidate the assessment will have regard to the candidate's demonstration of the following guiding factors:

- Understanding of fundamentals and ability to write these in a logical manner.
- The ability to research previous work in the same field and place the work in the context of published material.
- Scientific and practical experimental ability.
- Ability to hypothesise and draw conclusions.
- Ability to express ideas in a logical and concise form using relevant references to advantage.

The panel will jointly agree a mark which contains elements derived from the dissertations and oral presentation.

If the MSc Project by Distance Learning module is taken the presentation and interview may be undertaken remotely using a communication medium such as Skype. It is the student's responsibility to provide satisfactory access to facilities in their home country to enable this to be undertaken in a manner acceptable to the supervisor.

15.   Professional Body Recognition

The General Engineering is designed as a non-accredited award and as such has fewer restrictions on the assessment criteria.

The Aeronautical Engineering, Manufacturing Systems Management and Renewable Energy Technology awards are new awards and are not currently accredited by any professional body. We would expect to apply for accreditation of these awards by an appropriate body in the future but no guarantees as to the timing of the application or its outcome can be given.

All other awards are accredited by the Institution of Engineering and Technology (IET) as partial fulfilment of the award of CEng. In addition the MSc Mechanical Engineering and the MSc Automotive/Autosport are also accredited by the Institution of Mechanical Engineers (IMechE). This is an important recognition of approval by important bodies within the engineering professional fields which we are pleased to hold. This accreditation means that career development to full chartered status will be much easier as the educational requirements for registration are already approved.

16.   Academic Misconduct and Plagiarism

The University and faculty take the issues of academic dishonesty, plagiarism or cheating very seriously. If you get caught breaking the University's rules, you can expect to be punished – this might mean failing an assignment, failing a module or even failing your award and being asked to leave the University.

It is vitally important that you understand the rule regarding plagiarism. These can be found at: http://www.staffs.ac.uk/images/academic_dishonesty_tcm68-12681.pdf

There are several resources available to help you in writing and preparing assignments so that you do not break the rules. You might want to look at the following resources. http://www.staffs.ac.uk/uniservices/infoservices/studyskills/

If in doubt, make sure you ask your tutor before you submit work, or arrange to see someone in the Study Skills Centre (located in the library).

Appendix A – Glossary of Terms

Module	A unit of study with a defined learning outcomes, curriculum and assessment. The module definition is to found in the module specification for the module. Each module has a number of Credits, associated with it. A single module is worth 15 Credits and notionally requires 150 hours of learning activity to complete. This learning activity being divided between time for class contact hours with staff, independent study and assessment. The number of allocated learning hours rises in proportion to the number of Credits attributed to a module at the rate of 10 hour per credit. All modules are multiples of the basic unit of 15 Credits. So for example, a double module will be worth 30 Credits and will have a learning time of 300 hours.
Core module	This is a module that you must take and pass to qualify for a given award.
Award Option	This is a module chosen from a list of Award Option modules. Award Option modules are studied in conjunction with the core modules and from the prescribed set of modules for a particular named award
General Option	This is a module which you can choose from a set of modules which have been designed to complement your Award. This is to allow you to broaden your knowledge and skills base if you wish by taking some supplementary studies in addition to your main subject area.
Co-requisites	Co-requisites are those modules that you must take as a package. All the Level C core modules can be considered to be co-requisites. We have defined co-requisites to make sure that there is sufficient shape and coherence in your programme of study to make it a rewarding and interesting experience. A co-requisite is therefore a module which must be studied in addition to and normally at the same time as a particular module.
Pre-requisites	A pre-requisite is defined as a specific requirement that you must meet before you can take a module. In a similar way as entry to an Award was dependent on your achieving A-Level or BTEC passes for example, or having other prior knowledge, for some modules you will have to be 'qualified' to take them. This will normally mean studying for a module at an earlier level in the Award. Pre-requisites are specified to make sure that you have the knowledge and skills you will need to be successful in your chosen modules. Please refer to the Undergraduate Modular Framework Regulations for a more detailed description of this term in particular the distinction between the terms pre-requisites' and 'Special Admissions Requirements'.
Disqualified Combinations	Although rare, disqualified combinations are those modules which you cannot study together. This is normally because the content of the modules overlaps in some way, such that by taking both you would not cover the equivalent of two-modules learning.
Grade (Point)	On completion of the assessment of a module, you will be assigned a grade for that module in the range 0 to 15. In considering your performance at the end of a Level, grades will be averaged to produce grade point average for the Level (weighted by the size of the module). Grade points run from 0 to 15, with 0-3 being fail grades for undergraduate module, and 0-6 being fail grades for postgraduate modules.
Level	This indicates the academic level at which study is to be undertaken – Certificate level (module level 1), Intermediate level (module level 2) and Honours level (module level 3). Normally it corresponds to one year of study for full-time students. However, students may take modules from different levels at the same time, provided that they meet the requirements for their award.
Teaching block	A period of study into which the year is divided, that may include induction learning, assessment and academic counselling. There are currently two teaching blocks in each academic year.

Appendix A Curriculum Maps

Sem	Code	Module Title	CAT	Award CORE (C), OPTION (O) and ADDITIONAL (A) modules									Assessment %	
				EE	EL	TE	MT	ME	AE	MM	AN	RE	Exam	ICA
S1	CE01162-7	Photovoltaic Technology	15	C	O		O						50	50
	CE00154-7	Digital Electronic Systems	15	C	O	O	O						50	50
	CE00155-7	Digital Signal Processing	15	C	O	C	O						50	50
	CE00441-7	Power Electronics in Electric Utility Systems	15		C								50	50
	CE00427-7	Advanced Power System Analysis	15		C								70	30
	CE00451-7	Design Technologies for Masters	15				C	C	C	C			50	50
	CE00573-7	Advanced Engine Design	15						C				50	50
	CE00457-7	Energy Management	15		O		O	C				C	50	50
	CE01090-7	Renewable Fluids	15									C	50	50
	CE00457-7	Grid integration	15									C	50	50
	CE00996-7	Manufacturing Systems Management	15							C			0	100
	CE00995-7	Maintenance and Reliability Management	15							C			50	50
	CE01085-7	Cellular Network Planning Principles	15			C							50	50
	CE01086-7	Voice and Data over Broadband Networks	15			O							50	50
	CE01226-7	Advanced Aeronautical Principles	15								C		50	50
	CE01225-7	Aircraft Propulsion Systems	15								C		50	50
S2	CE00093-7	Embedded Real Time Systems	15	C	O		C						0	100
	CE00186-7	Telecommunications	15	C	O	C							50	50
	CE00786-7	Optical fibre communication systems	15	O		C							70	30
	CE00787-7	Wireless Navigation Systems	15	O		C							70	30
	CE00442-7	Power System Protection	15		C							O	50	50
	CE00444-7	Flexible AC Transmission Systems and Custom Power	15		C							O	50	50
	CE01220-7	Industrial Robotics and Control	15	O	O		C	O			C		50	50
	CE00576-7	Advanced Vehicle Aerodynamics	15						C		C		50	50
	CE00577-7	Advanced Vehicle Dynamics	15						C				50	50
	CE00578-7	Sustainable Design and Manufacture	15				O	O	O	O		C	50	50
	CE01091-7	Renewable Thermals	15									C	50	50
	CE00286-6	Management, Planning and Control of Production	15				O			C			70	30
	CE00994-7	Discrete Event Simulation	15				O			C			30	70
	CE01060-7	Advanced Engineering Materials	15				O	O	O	O	O	O	50	50
S1 & S2	CE01201-7	Technical and Study Skills for Engineers	15	C	C	C	C	C	C	C	C	C	0	100
	CE00633-7	Research Methods & Project Management	15	C	C	C	C	C	C	C	C	C	0	100
	CE00447-7	Structural Integrity	15				O	C	C	O	C	O	50	50
	CE00449-7	Applied Structural Integrity	15				O	C	O				50	50
	CE00455-7	Technical Paper Authoring	15	O	O	O	O	O	O	O	O	O	0	100
	CE00058-6	Industrial Responsibility	15	O	O	O	O	O	O	O	O	O	0	100
S3	CE00090-7 / CED01228-7	MSc Project OR MSc Project by Distance Learning.	60	C	C	C	C	C	C	C	C	C	0	100
	CE00761-7	Industrial Placement (Engineering Masters)	15	A	A	A	A	A	A	A	A	A	0	100

Key to Columns

EE - Electronic Engineering   EE - Electrical Engineering   RE – Renewable Energy Technology   TE – Telecommunications Engineering
MT – Mechatronic Engineering   ME – Mechanical Engineering   AN – Aeronautical Engineering   AE – Automotive/Autosport Engineering
MM – Manufacturing Systems Management