Version22015



2015

# Higher National Certificate in Chemical Engineering by Flexible Open Learning

School of Science & Engineering

**Teesside University** 

Teesside University Open Learning Engineering

# **Programme Handbook**

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## Teesside University Open Learning (Engineering) -TUOL(E)

TUOL(E) the leading international designer and developer of engineering and technology open learning programmes, has one of the largest portfolios of accredited open learning programmes serving the engineering and process industries worldwide. TUOL(E) (formerly COLU) has been operational for 25 years and since 2002 has been part of Teesside University School of Science and Engineering.

Our HNC programmes are accredited under licence from Edexcel. The HNC normally takes between 2-3 years to complete, although there is some flexibility in this provided that you complete at least two modules per year. Normally we would expect most students to study three modules per year.

It is also important that you realise that open learning study requires a considerable degree of self-discipline. You must be prepared to devote both time and effort to studying not withstanding other distractions that may be present.

"Excellent course materials. Excellent tutors support. Very prompt marking of assessments with detailed feedback"

### **Programme Structure**

One of the benefits of distance learning is that there is more flexibility to start and study your programme at a time that suits you. Students are able to commence study at three different points in the year, normally February, May/June and October.

The HNC programmes are divided into modules some of which are defined as core (essential) and some electives where you have more flexibility over which to take to meet your particular interests.

Depending on any previous study that you have undertaken at this level and /or other relevant experience you may apply to be given exemptions from one or more modules up to a maximum of 60 credits (via our Accreditation of Prior Learning or APL scheme) Your programme Leader will help with advice and guidance on whether (and how) you may be exempted from modules, which modules you will need to study, and the possibility to undertake additional or alternative modules.

For an HNC you must complete a minimum of 125 credits including the core modules with a maximum of 50 credits at level 5 including the compulsory project.

The programme structure is designed as a sequence of blocks of 2 or more modules that you study sequentially, starting with Analytical Methods for Engineers and normally finishing with your project. The project module has been designed to allow you the opportunity to use the knowledge and skills you have acquired throughout the programme alongside your own experience to demonstrate your understanding across a range of engineering topics. NB. Where students intend to progress to HND they may defer the project until the end of the HND course.

Whilst we strongly recommend studying the modules in the sequence shown, in some cases it may be possible to study alternative or additional modules to either accelerate, or tailor the course to suit your needs e.g. when you have particular requirements within the workplace. However this is subject to negotiation and availability of a suitable alternative pathway. You would need to discuss this with your programme leader who can advise you on other modules which might be available and allowed as alternatives within your particular course [A list of currently available TUOL(E) modules is shown in Appendix 3].

The programme Learning Outcomes are shown in Appendix 1. For students who withdraw from the programme without completing the required credits for the full award a series of fall back certificates can be awarded depending on the number of credits achieved.

On completion of the HNC you have the opportunity to progress on to the HND programme, and potentially further. Typical structures of both HNC and the follow up HND programmes are shown on the following page.

NB. An HND programme consists of 16 modules of which a minimum of 8 modules must be at level 5, including any level 5 modules completed within the HNC programme.

# Standard programme structure for an HNC in Chemical Engineering

Months	Block	Module Title (Credits) Level/Type	Module Title (Credits) Level/Type	Module Title (Credits) Level/Type
1-12	1	Analytical Methods for Engineers (15)	Mass Energy Balance (15)	Chemical Engineering Unit Operations (15)
		Level 4 Core	Level 4 Core	Level 4
12-20	2	Fluid Mechanics (15)	Materials Engineering (15)	
		Level 4 Core	Level 4	
21-28	3	Heat Transfer and	Mass Transfer	
		Combustion (15)	Operations (15)	
		Level 4 Core	Level 5 Core	
29-32	Р	*Project (20) unless contin Level 5 Core	uing study for HND	

# Typical structure for an HND in Chemical Engineering as a top up from an HNC in Chemical Engineering

Months	Block	Module Title (Credits) Level/Type	Module Title (Credits) Level/Type	
1-8	4	Engineering Thermodynamics (15) Level 5	Statistical Process Control (15) Level 5	
9-16	5	Plant services (15)	Control Systems and Automation (15)	
		Level 5	Level 5	
17-24	6	Measurement of process Variables (15)	Safety Engineering (15)	
		Level 4	Level 5	
29-32	7	Engineering Design (15)	Business Management Techniques (15)	
		Level 5	Level 5	
33-36	Р	*Project (20) unless previously completed for HNC Level 5 Core		

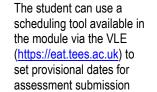
### **Student Journey**

Student completes online application form, admissions tutors will assess the student's entry requirements and any appropriate accreditation for prior learning. A bridging course is suggested where necessary.

The student is sent an offer letter.

Once the student has completed the online enrolment process and registration they can purchase their first module to start on the next available start date. The student will be sent links to the learning materials, details of the module tutor, and their login and password to enable access to the course and support materials through the VLE (https://eat.tees.ac.uk).

An induction presentation is available through the VLE (https://eat.tees.ac.uk) 'open learning student support'



Module tutor and student to have regular contact monitored via the VLE (<u>https://eat.tees.ac.uk</u>)

Students normally complete 3 modules per year but are required to complete a minimum of two modules each (30 credits)

All assessments are submitted and graded with feedback via the VLE (<u>https://eat.tees.ac.uk</u>)

An exit interview with the student and module tutor will be conducted on completion of the module.

This process will continue until student has completed all modules necessary for completion of the award.

On completion of the award programme leader will contact student to discuss progression routes available.

On completion of module the student will contact the programme leader to discuss next module.

The programme leader will monitor students' progress through modules.

### **E-learning@tees**

The heart of your open learning programme is the University's "Virtual learning Environment (VLE)", or " E-Learning" site (<u>https://eat.tees.ac.uk</u>) known as elearning@tees which will be the primary mechanism by which you access the course and its support materials and interact with the University staff and fellow students. It is highly recommended that you use an up to date browser, ideally Chrome or Firefox to access this to ensure the best experience (NB the help link at the top of this screen will allow you to test your browser for compatibility)

When you join the course you will be given a user name and initial password (which you will need to change) so that you can login and access the course

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Welcome	- Blackboard Le 🗙 🦲		
$\ \ \leftarrow \ \Rightarrow \ \ G$	https://eat.tees.ac.uk/		☆ =
			n 🕐 Login
	elearning		
8	@ TEES	Welcome	Help
Log	in to E@T		
A	Change Text Size Dight Contrast Se	etting	
	You are not logged in		
	Welcome to E-learning @ Tees.		
	USERNAME:		
	PASSWORD:		

Each programme and each module within it has its own e-learning site that will include the online course materials and other relevant information, such as the module handbook, links to enable you to download printable versions of all, or selected parts of the materials if you want to use them when computer access might not be convenient.

You will also use the e-learning system to submit assessments, access your grades and feedback from your tutor, and to access your previous grades/ feedback as well as provisional and final grades. It is crucial that you access the site regularly (at least once per week) to check for any notifications and feedback.

To access the course materials once you have logged in you will need to click on the relevant course title, which will be shown under the heading "Current Modules." (An example is shown below).

#### Current Modules

Modules you are studying:

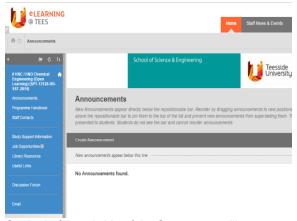
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# HNC / HND Chemical Engineering (Open Learning): SPT-13126-RR-SST-2014

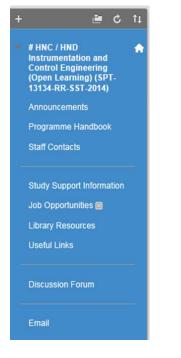
When you first enrol on the course you will only be able to see the general course information. However on the start date for each module you are studying, the information for that module will automatically become available as an additional link and you will be able to click on and start on it (in the example below the Analytical Methods for Engineers Module has been made available to a student studying the Chemical Engineering course).

Мо	dules you are studying:	
٢		
Ø	# HNC / HND Chemical Engineering (Open Learning SPT-13126-RR-SST-2014	):
M	Analytical Methods for Engineers (by Flexible Open Learning): 1021COL-N-GJ1-2014	

If you click on and open the site for your course, you will be greeted by a screen, which looks something like this.



On the Left hand side of the Screen you will see a menu bar that provides access to a range of support materials, including the course specific announcements, the programme handbook and the discussion forum for your course.



Similarly when you click on and start your module you will be greeted by a similar screen which provides access to the Study Materials". This is described in more detail in the following section.

The VLE (<u>https://eat.tees.ac.uk</u>) also allows you to access to the discussion forums, which provide a mechanism for student-to-student and student-to-staff interaction. At both course and module level. You are strongly encouraged to make use of these, which are designed to give you a more effective and enjoyable learning experience.

If you click on the Discussion Forum link in the menu bar it will take you to the links both to post to the forum and another link providing detailed instructions on how to do it.

#### Discussion Forum

#### Module Discussion Forum



Please use this discussion forum to discuss the topics in this module. Create a new thread in the forum to ask a question.

Please do not use this forum to discuss the assessment for this module.

#### Discussion Forum Student Help



Our <u>Discussion Board Guide for Students</u> provides information on how to use the discussion forum, including how to create new threads and reply to existing threads

If you are having difficulties in using, or just want to get more confident in using the VLE (e-Learning Site) then a good place to start is to explore the comprehensive range of support videos and other information, which you can access by clicking on the help tab at the top of the screen.

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Home	News & Events	Library	Help	My Portfolio

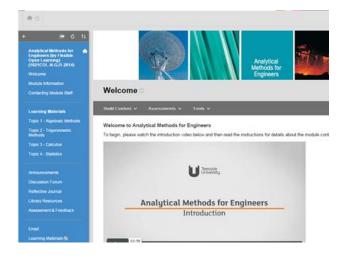
Alternatively, or If you are having difficulties accessing your e-learning account please contact the ICT helpdesk

- E: <u>sse-helpdesk@tees.ac.uk</u>.
- T: +44 (0)1642 342531

### **Study Materials**

You will be provided with comprehensive study materials for each of the modules you will study. Each module is delivered online through interactive webpages containing a series of 'lessons' grouped into topics and is accompanied by its own module handbook that explains what it covers, what the expected learning outcomes are and how it is assessed. Each part of the course includes an introduction to it, study advice, self-assessment questions and a summary, with many also containing videos and other tools to help you understand the topics. In some modules you may also receive experimental kits that you can use at home and/or other specialist software.

These are accessed via the relevant module site for the module you studying which is accessed via the VLE (<u>https://eat.tees.ac.uk</u>). When you click on this you will be greeted by a screen similar to this (note this will open in a new tab in your browser – it is recommended that you do not close the tab for the module site so that you can quickly return to it later.



On the left hand side of the screen you will see a menu bar which provides links to additional module information and staff contact details, the learning support elements of the module, notably the Discussion forum, Library resources and Assessment information

Every module is divided into a number of topics, which are in turn subdivided into "lessons". If you click on the "Learning Materials" link in the menu this will take you directly to the relevant topic and lecture. It is important that you tackle these in order

You will find a list of lessons on the welcome page for each topic under the "View the Lessons" section indicated by the icon:



Simply click on the relevant lesson to access it (starting with the first one)

All lessons have common features:

- The introduction or overview of the lesson. Your aims tell you what you should have achieved when you have completed the lesson. They provide learning objectives which should be referred to while you are working through the lesson.
- Study advice which helps you plan your work strategy by pointing out any special resources needed or unusual time requirements.
- The on-line learning materials themselves
- Self-assessment questions enable you to check your progress and find out if you have achieved your objectives. Solutions or answers are provided but you will not test your learning if you look at the answers first so there is a button to enable you to unhide the answers once you have attempted them

#### Toggle view/hide answers

A summary which reinforces what you have completed and generally provides a quick reference to the contents of the lesson

Once you have opened and launched a lesson you will be taken to a new page which contains the study materials. This has a very similar appearance to the module and course e-learning pages previously described, but with a slightly different layout to make it easier to read and work through on-line

A typical lesson site looks like this:

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 Introduction

 Dealing with Brackets

 Self-Assessment Questions 1

 Answers to Self-Assessment Questions 1

 Implied Brackets

 Self-Assessment Questions 2

 Answers to Self-Assessment Questions 2

 Answers to Self-Assessment Questions 2

 Moving the Subject Symbol

 Self-Assessment Questions 3

 Answers to Self-Assessment Questions 3

 Dealing with Powers

 Self-Assessment Questions 4

 Answers to Self-Assessment Questions 4

### FME-1-4 Foundation Mathematics for Engineering

Lesson 4 : Algebraic Transformation

#### Introduction

Lesson 1 introduced you to a systematic approach to formulae transfic board for dealing with a wide range of different formulae. You will rem opposites and the rule of **balance** helped, to a large extent, to overcl of a simple recipe.

These two rules alone, however, do not 'paint a complete picture' of tr implications. For example, some formulae containing certain features rules, relating particularly to those features. It is also essential that in in the transformation process we don't break any fundamental rules of al This lesson deals with some of these points, and also provides an opp basic algebra.

#### At the completion of this lesson, you should be able to

- transform formulae involving brackets
- understand the concept of implied brackets

recognise the advantage of transforming the subject symbol
transform formulae involving indices.

The menu on the left hand side provides links to the various subjects covered and shows you where you are within the lesson. The menu also allows you to navigate quickly between the different subjects covered in the lesson as an alternative to scrolling up and down the page



There is also a small menu bar at the top of the page (see image above) which allows you to move to other lessons within the topic and to print out the lesson if you prefer (this links to a printable version of the file, which you can scroll through and decide which page or pages you wish to print if you do not want to print out the whole document).

If you have the relevant software installed on your computer you may also wish to print and save this to a pdf file so that you have access to the lessons even if you do not have internet access.

Once you have completed a lesson or topic you can return to the module VLE site by simply closing down the lesson tab on your browser or clicking on the Module VLE site tab.

### **Tutor Support**

Each course (or programme) has a designated programme leader who will support you throughout your studies. In addition each separate module that you study has its own module leader/tutor that will provide specific academic support to you as you study that module. Both your programme leader and module tutor will keep in regular contact with you via the VLE (<u>https://eat.tees.ac.uk</u>).

You can find out who they are and how to contact them by clicking on the following menu links on the left hand side of the screen for the module and course E-Learning sites respectively.

#### Contacting Module Staff

#### Staff Contacts

Your programme leader can also help you to develop a suitable study schedule/plan to help you successfully complete the course. It is important to remember that your programme and module leaders are there for guidance and support. Don't hesitate to ask for help if you need it at any point. Your programme and module tutors can be contacted by a variety of means: the VLE (https://eat.tees.ac.uk), email or telephone although we recommend the VLE (<u>https://eat.tees.ac.uk</u>) as the first point of contact.

Whilst we will of course do our best to offer comprehensive academic support to you, in order to provide the best possible learning experience for you, we think it is important that you are part of a learning community of other students who are studying the modules alongside of you, and with whom you will be able to keep in contact through online forums linked to each module.

To facilitate this crucial peer support process, the modules run at specific points in the year with fixed start dates so that you are broadly likely to be at the same point in the module at the same time and have a broadly shared experience to use as the basis of your interaction.

### Assessment

As you work through each lesson there will be selfassessment questions and answers to help check your learning. These are known as formative assessment and do not contribute to your grade, but are essential to help you prepare for the assessments that will be used to formally test your learning and understanding (known as summative assessment).

At set points in the course you will be advised that one of the formal assessment exercises are available for you to complete. It is important to note that these have defined completion and submission dates. If you do not submit by the relevant deadline then you will automatically be deemed to have failed that assessment. IT IS CRUCIAL THAT YOU TAKE CAREFUL NOTE OF THESE DATES!

Depending upon the module concerned these Tutor Marked Assessments or TMA's can take a number of forms including essays, calculations, online tests, multiple choice exercises, and time constrained examinations (the nature of the assessment is contained in the module handbook). In some cases you may also be required to have a telephone interview with your tutor so that they can test your understanding to confirm that the submitted work is your own

#### Assessment & Feedback

Information on these summative assessments will be provided via the E-Learning/ VLE site (<u>https://eat.tees.ac.uk</u>) for the relevant module by clicking on the Assessment and Feedback Menu link). This will include the dates at which these assessments are released to you, the deadlines for completion and the dates by which you will receive feedback on your performance.

At the point at which your assignment is released to you, it will be visible within your assessment and feedback page and a link will be available for you to submit it. This link to submit the assignment will disappear once the submission deadline has passed.

When you have completed your assessment you will submit it electronically via the VLE

(https://eat.tees.ac.uk). There is guidance on how to submit assessments available in the Help section of the VLE (<u>https://eat.tees.ac.uk</u>) and within the Assessment and Feedback section of your module site.

If you are unable to meet the deadline for submission for legitimate reasons, then it is possible to apply [IN ADVANCE] for an **extension**. More information is provided on the module VLE site under the Assessment and Feedback section where there is also a link to the appropriate forms. Please bear in mind however that this may mean that you miss the start date for the next module which may mean a significant delay in completing your course, so wherever possible we would suggest that you avoid seeking extensions unless absolutely necessary [NB see also the section on Mitigating Circumstances in The Guidelines on Assessment and Academic Regulation in this handbook ]

### **Extension Requests**

It is the responsibility of all students to complete examinations and to submit work for assessment by the set date for that assessment. Where a student's circumstances are such that the student feels unable to meet this deadline, the student is strongly encouraged, as soon as possible, to discuss his/her circumstances with an appropriate member of academic staff (usually the Module Leader) in advance of the submission/examination date. The member of staff will help the student identify a suitable type of extension, depending on the circumstances.

<u>Short extensions</u> will normally be at decided at module level and allow fro an extension of one week on the agreed submission date.

Long extensions will be considered when circumstances establish the principle that the circumstance impacts on the *time* taken to complete and submit an assessment but does not necessarily impact on a student's *performance*. So, for instance, personal disruptions such as moving house or change of job may constitute acceptable reasons for extension or deferral. In either situation a form is available to complete and submit as appropriate and as per instructions in the VLE site.

# How to succeed in your Studies

#### **Tips for success**

The open learning programmes we offer have been developed over many years to enable you to continue your study without the constraints of attending university. You are in control of your learning but to be effective you will require a very high degree of selfdiscipline. In particular you need to:

- Understand the amount of work and time that you will need to set aside for the course
- Develop a 'habit of study' with scheduled times to undertake the work when you will not be interrupted.
- Have a place to work
- Produce and stick to a study plan and a schedule for completing the formative (selfassessments and the formal assessments for each module
- Organise your books and notes
- Produce a regular output of written work and make sure you are aware of and stick to deadlines for completion and submission of work
- Regularly check targets
- Maintain regular contact with your module tutor and programme leader

Open learning can be a lonely experience and it is really important that you attempt to make contact with fellow students on your course and modules so that you can benefit from the peer support and the learning community/network of fellow students this will bring.

Remember if at any point in your study you feel that you need help, you can contact the academic tutors who are not only subject specialists, but who also have experience and expertise in flexible open learning study. You can access tutor support online, via email, or telephone.

### **Background Study**

Although the course materials are largely selfcontained, students are actively encouraged to read outside the material provided with their modules. Further reading can be both enjoyable and also help you to link together disparate aspects of the course. Many successful students will tell you that reading widely is a good way of improving your understanding of the taught material.

### **Modules and Content**

For an HNC the majority of your course will comprise of modules at level 4, with 2 or 3 modules at level 5 (including your project)

Whilst there is a degree of flexibility to tailor course content to suit your need – for the large majority of students we recommend that the modules are undertaken in a prescribed pattern and sequence. This helps to maintain the integrity of the course and the modules link effectively to reinforce your learning. In any event you must complete all the mandatory core modules, and the required number of electives.

#### Analytical Methods for Engineers (15 credits):

The aim of this module is to provide the fundamental analytical knowledge and techniques needed to successfully complete the core modules of Higher National Engineering programmes. It is also intended as a base for the further study of analytical methods and mathematics, needed for the more advanced option modules. This module has been designed to enable you to use fundamental algebra, trigonometry, calculus, statistics and probability, for the analysis, modelling and solution of realistic engineering problems at Higher National level.



Mass Energy Balance (15 credits): This module introduces you to the concepts of laws of conservation of mass and energy through a process, a sound strategy for setting up and solving mass and energy balance problems related to chemical processes, the use of steam tables for solving energy balance problems and the concepts of recycles and purges.

#### **Chemical Engineering Unit Operations (15**

**credits):** To develop an understanding of basic theories and principles involved in the specification and design of equipment for those unit operations involved with the separation of solid-liquid mixtures, gas cleaning and humidification.

#### Fluid Mechanics (15 Credits):

The module applies the principles of fluid mechanics and the techniques used to predict the behaviour of fluids in engineering applications. The module looks at the forces exerted by a static fluid on immersed surfaces, viscosity; the flow of fluids through pipelines and around luff bodies and examines hydraulic machines.

#### Materials Engineering (15 Credits):

In this module students are provided with basic background knowledge and understanding of the properties, selection, processing, applications and utilisation of engineering materials.

#### Heat transfer and Combustion (15 Credits):

This module is intended to develop your knowledge of principles and empirical relationships to enable

you to solve practical problems involving heat transfer, combustion and the specification of practical engineering equipment.



Mass Transfer Operations (15 credits): This module enables you to develop an understanding of basic theories of mass transfer and phase equilibria and to be able to specify and design equipment for mass transfer operations such as distillation, gas absorption, liquid extraction and leaching processes

#### **Project (20 Credits):**

This module presents the opportunity for you to use the knowledge and skills you have developed at work and in your programme of studies, in the definition, management and completion of a work-related project, including the presentation of your findings to an appropriate audience. The module thereby aims to integrate the skills and knowledge developed in other modules of the course within a major piece of work that reflects the type of performance expected of a higher technician at work. You are advised to study this module last and are advised to use a 'real' project based on your own workplace where this is possible.



### Academic Staff & Profiles

#### **Programme Leader:**

David Peel: David Peel is the Program leader for



HNC/D Chemical Engineering. He completed his degree and doctorate in Chemical Engineering at Newcastle University before working in post doctoral research positions in advanced process control at both

Newcastle and Oxford University. David joined Teesside University as senior lecturer in Chemical Engineering where he initially stayed for 7 years. Since then he has worked for over a decade in automation R&D and as a consultant to the power industry in the UK and US. David recently returned to teaching and spends part of his time teaching within the mainstream University and part of his time supporting the chemical engineering and process engineering courses in the University's distance learning unit.

T: +44 (0)1642 342731 E: D.Peel@tees.ac.uk

#### Module Leaders:

Derek Casson: Derek Casson is the Programme



Leader for HNC/D Electrical and Electronic Engineering. Derek worked in the telecommunication industry prior to becoming a lecturer in engineering. He gained a HND in Electrical & Electronic Engineering from Leicester Polytechnic and a Certificate of

Education from Huddersfield Polytechnic. He also gained a BA (Hons) from the Open University. T: +44 (0)44 (0)1642 342526

E: D.Casson@tees.ac.uk

David Cradddock: David Craddock is the



Programme Leader for HNC/D Mechanical Engineering. He gained a BSc (Hons) in Mechanical Engineering from Newcastle Polytechnic and has worked as both production and design engineer. David has a Post Graduate Certificate and an

MA in Education. Between periods teaching engineering in the UK he has worked on technical education projects in Bangladesh, Cambodia and Kiribati. David developed an interest in distance education before joining the university as an open learning author and tutor.

**a** +44 (0)1642 342559 **e:** D.Craddock@tees.ac.uk

Neville Winter: Neville is the Program leader for



HNC/D Instrumentation and Control Engineering. He completed his degree at the University of Northumbria whilst working in an Electrical Engineering role for a mutinational manufacturing company. Neville joined Teesside University as senior lecturer in Electrical Engineering where he has worked for the past two years. Prior to working at the University Neville spent over a decade in industry followed by a lecturing role in a local further education college delivering higher education programmes. Neville spends part of his time supporting the Electrical and Instrumentation and Control Engineering courses in the University's distance learning unit and the remainder teaching within the mainstream University.

**T:** +44 (0)1642 342476

E: n.winter@tees.ac.uk

#### David Wishart: David is the tutor for HNC/D



Analytical Methods and Engineering Science in the University's distance learning unit. He completed his degree at Loughborough University before working in electronic design for a large Japanese consumer

electronics manufacturer in both the UK and Japan. He did this for twenty years before leaving the industry and completing his PGCE in order to embark on a career change as a lecturer in electronics and maths. David joined Teesside University as a distance learning tutor where he works part time alongside a lecturing job teaching Electronic Engineering at a local Further Education college. He is available in the office on Mondays and Fridays. **T:** +44 (0)1642 738215

E: <u>e.d.wishart@tees.ac.uk</u>

## Guidelines on Academic Assessments and Regulations

Assessment is key to learning. There is much more to assessment than just giving you a mark for a piece of work. Well-designed assessment helps both you and your tutors understand how well you are progressing, and in what areas you may need additional support.

There are two main classes of assessment, formative and summative.

Formative assessment takes the form of the selfassessment questions within the study packs; these are intended to provide feedback for students. If you are unsure of these questions you can contact your tutor for feedback and guidance. The self-assessment questions are designed to help you understand your strengths and weaknesses. These formative assessment questions are very important. Understanding where you are in the context of understanding the subject is vital to success.

Summative assessment is graded, and contributes to the overall module grade. This includes traditional forms of assessment such as short answer problem solving questions, essays, practical exercises and reports.

A typical assessment schedule is provided in Appendix 2.

A scheduling tool is available on the VLE (https://eat.tees.ac.uk) Open learning Student Support.

#### **Assessment Submission**

Assessments should be submitted electronically, via the VLE (<u>https://eat.tees.ac.uk</u>). If your work precludes this then separate arrangements will be made with your module tutor although this should only be in exceptional cases. You are advised to keep a copy of your assessment prior to submission so you have a copy for your own review at a later date.

#### **Guidelines for Assessment Format**

Guidance on the production of standard assessment types is given below.

#### Essay/literature review-based reports

The essay must be written in clear and concise English, normally in the past tense, and should comprise: (a) Title; (b) Summary; (c) Introduction; (d) Main Body of Text; (e) Discussion with Conclusions if appropriate; (f) References.

#### **Practical-based reports**

The report must be written in clear and concise English, normally in the past tense, and should comprise: (a) Title; (b) Summary; (c) Introduction; (d) Methods; (e) Results; (f) Discussion with Conclusions if appropriate; (g) References.

#### **Guidelines on Referencing & Citation**

References are those books and journal articles, which you have consulted and made *direct* use of the material contained in them to generate your submission. Correct referencing and citation ensures you acknowledge the work done by others. Referencing and citation is vital in all your written work because of the University's strict rules on plagiarism.

For modules delivered by the School of Science & Engineering you are required to use the **Harvard System** unless the module specification states otherwise. You will be given clear guidance if you are expected to use alternative referencing systems. The School of Science and Engineering has specific guidelines on referencing and citation available via the link below:

http://tees.libguides.com/TUOLE

#### Abbreviations, Units & other details:

Abbreviations should be defined at first mention in both Summary and main text.

#### **Feedback and Grades**

Assessment and feedback will follow the University's Assessment and Feedback Policy (University Handbook: Section 1 Assessment and Feedback Policy)

http://www.tees.ac.uk/docs/DocRepo/Quality%20hand book/I-AFP.doc

At this point a provisional grade and feedback will be agreed. Please note the following:

"This feedback is being given for purposes of advice and guidance and to assist your learning and development in this module. References to standards or grades are entirely provisional and subject to confirmation following University procedures. Only University Assessment Boards are able to issue confirmed, definite grades."

Feedback is in the form of individual feedback sheets. Staff will complete these during their assessment of your work. Feedback and grade will normally be provided within four working weeks of submission. Your feedback will be available via the VLE (https://eat.tees.ac.uk). The grading criteria are provided in Appendix 4.

#### Mitigating Circumstances

This is the process by which the university takes account of significant (and evidenced) factors outside your control which may have impacted on your studies.

The University Procedure for Mitigating Circumstances can be found at <u>www.tees.ac.uk/docs/index.cfm?folder=student%20re</u> <u>gulations&name=Academic%20Regulations</u>

It is your responsibility to complete the appropriate proforma (and to notify the Programme leader where appropriate) if he/she considers that there are any mitigating circumstances affecting your performance in assessments.

Illness – Any form of illness or injury which coincides with, or predates, the submission date of an assignment must be supported by written medical evidence. This could constitute either a medical certificate or written communication from a GP. *Illness or injury as an excuse will not be considered without such evidence.* 

Personal Circumstances – In this case on-going personal or family circumstances which are likely to affect assignment submission, programme leaders should be informed well in advance of any deadlines. The University has a number of Student Counsellors whom students may see by appointment. The Students Union also provides Counselling Service for students who wish to contact them and may provide confidential letters of support that would be considered by the Mitigating Circumstances Board. *The onus is on the student to make contact with someone appropriate.* 

Documentary evidence will be required to support the claim.

#### **Assessment Review (appeal)**

If you feel that you have been disadvantaged in some way through the assessment process which adversely affects your award / grade, then an opportunity is available for you to make an application for assessment review. Copies of the procedure and the necessary documentation can be obtained from the School of Science & Engineering Administration Office or via the Student Ombudsman Office.

#### Academic Misconduct

What follows is only a brief summary of the University's Academic Misconduct procedure and should be read in conjunction with the Regulations relating to Academic Misconduct (Taught Components and Programmes) available at: www.tees.ac.uk/docs/index.cfm?folder=student%20re gulations&name=Academic%20Regulations You are strongly recommended to read those Regulations. They provide a detailed explanation of academic misconduct, the procedures which must be followed when an academic misconduct offence is suspected and the possible penalties.

Academic misconduct is defined by the University as any activity or attempted activity, which gives an unfair advantage to one or more students over their peers and is treated very seriously.

To ensure that students are treated fairly and equitably, academic misconduct is divided into the following three types:

- Academic Negligence: This is regarded as the least serious offence and covers first time minor offences. It includes plagiarism that is small in scale, not related to the work of other students, and which is considered to have resulted from ignorance or carelessness.
- Academic Malpractice: This covers extensive paraphrasing of material with no acknowledgement of the source, systematic failure to reference, submitting work that has already been submitted for another assignment, and subsequent cases of Academic Negligence.
- Academic Cheating: This is regarded at the most serious offence and covers Plagiarism in dissertations/final year projects/taught doctorate modules, collusion with other students, theft, commissioning/purchasing

work, falsification of results/data, and all examination irregularities.

If suspected of academic misconduct, you will be required to attend either an informal or formal meeting and if subsequently found guilty, you will receive a penalty, the most serious of which can be exclusion from the University. The processes and penalties are described in Appendix 2 of the Regulations. If you are found guilty of academic misconduct after the end of your course, any award that you have received may be withdrawn. This can be done after you have graduated.

The University has an Exceptional Cases Procedure, which can be used when it is suspected that a piece of work submitted by a student is not their own work. You could be interviewed to determine the authorship of work. You are therefore strongly advised to retain materials used in developing work.

The following tips may help you to avoid academic misconduct: Do:

- Familiarise yourself with the regulations and penalties that can be incurred. For professional programmes, a single case of academic misconduct may result in you being discontinued from your course.
- Make sure that you know how to correctly acknowledge other people's work or opinions, and get feedback from your Tutor on whether or not you are doing this correctly.
- Take care when making notes from books or articles. Always keep a record of whether your notes are a paraphrase of the source or a direct quotation, so that you don't inadvertently include quotes without proper acknowledgement. [This is a frequently cited reason students give when accused of academic misconduct.]
- Seek support from your Module or programme Leader if you are experiencing difficulties in completing your work on time.

<u>Don't</u>

 Cut and paste (or reproduce) chunks of material from electronic sources or books/articles. Even if you acknowledge the source, material not stated as being a direct quotation will make you vulnerable to an accusation of academic misconduct.

- Loan your work to other students. If it is then copied, you may be accused of academic misconduct.
- Borrow work from current or previous students.
- Submit the same work for different assessments.
- Get someone else to do your work. Essaywriting web sites don't always keep their promises and have been known to inform universities of students who have purchased work.

### Support for Your Learning

#### **Academic Support**

If you are experiencing difficulty coping with the material in any module, you should initially approach the Module Leader, and explain the problem. It is primarily the Module Leaders responsibility to deal with these difficulties.

#### Programme manager Associate Programmes

and Partnerships: Alternatively, you can consult Dr Helen Tidy if there is an issue of general concern and this can be raised at the programme board.

#### Library

<u>http://lis.tees.ac.uk</u> T: +44 (0)1642 342100 E: libraryhelp@tees.ac.uk

Library & Information Services (L&IS) seeks to provide a high quality service based upon an extensive collection of print and electronic resources, inspiring spaces for learning and support from qualified staff.

# How do I find Library resources for my subject areas?

For most programmes Reading Lists Online is available to help you find the specific resources recommended to you by your tutors. Reading Lists Online can be accessed via the relevant elearning@tees site.

#### The online LibGuide for TUOLE

http://tees.libguides.com/TUOLE is the best place to start to discover the available resources. You will be using a variety of resources, such as e-books, ejournals and databases that are available using your University ICT username and password, which are provided by TUOLE. Please note that these resources are only to be used for academic work. The licences for these resources prohibit their use for commercial research.

#### **The Learning Hub**

The Learning Hub offers guidance to all students on developing their skills as independent learners. Support includes <u>online resources</u>. Guidance is available on a wide variety of academic skills, for example literature searching, referencing, writing and maths.

#### **University Libraries**

The Middlesbrough Campus Library is situated on Southfield Road next to the Students' Union Building. There is also a library at the Darlington campus.

#### Where can I get further help from?

Help is available so that you can get the most from the Library:

- For general library queries email libraryhelp@tees.ac.uk
- For further help with finding and using information resources contact Clare Whittingham who is the Academic Librarian for engineering: c.whittingham@tees.ac.uk

#### **Working Together**

The aim of L&IS is to provide you with the learning resources and a study environment to help support you in your studies at University. To enable everyone to benefit fully from L&IS, we need your active co-operation to ensure that we can deliver this aim. The Library's regulations and policies can be viewed at <u>http://lis.tees.ac.uk/regulations</u>

#### **Student Support Officer**

The School also has a Student Support Officer, Sandra McCormick (s.McCormick@tees.ac.uk) who can help students to access advice and support, and can often provide guidance directly on many issues. You are welcome to contact Sandra on any matter, large or small. She can be contacted by email and also via telephone, Skype etc..

#### **Disabilities Support**

The University provides confidential help and support for students who have disabilities or special problems, which may affect their study or assessment periods. Specialist staff in University Student Services assess the disability or learning difficulties to ensure that appropriate support or allowances are provided.

Students with disabilities and specific learning difficulties are encouraged to discuss with the advisors how the University might meet their requirements. The aim is to enable students to participate fully in their programme through additional support that may be in the form of finance / equipment / amanuensis.

More details are available at: <a href="http://www.tees.ac.uk/sections/studentsupport/">http://www.tees.ac.uk/sections/studentsupport/</a>

In the first instance, students who require special needs provision should contact the School Special Needs Coordinator, Garry Bishop (<u>g.bishop@tees.ac.uk</u>), who will make arrangements for expert assessment of needs, and be able to communicate agreed arrangements to relevant teaching staff. Students requiring special needs provision are advised to discuss their situation with their Programme Leader. Confidentiality is always respected.

#### **Student Health Service**

The Student Health Service has a registered nurse that can provide confidential advice about any health-related problems that you may have. Where appropriate, treatment is available and drop-in clinics are held daily. Advice on health matters can be sought from the University Student Health Advisor on +44(0)1642 343202.

A student counselling service is available. More details of these and similar services are available at <u>http://www.tees.ac.uk/sections/studentsupport/</u>

#### **Change of Personal Details**

It is important that we are kept informed of any changes in your personal details, such as your name, telephone number or address. Such information is essential so that Assessment /Award results are accurately recorded and posted.

Please send an email to the programme leader as soon as possible, so that we know your email address.

### **Appendix 1: Programme Learning Outcomes**

The programme will enable students to develop the knowledge and skills listed below. On successful completion of the programme, the student will be able to:

Knowle	edge and Understanding (insert additional rows as necessary)
<b>K</b> 1	Demonstrate knowledge and understanding of the mathematical methods necessary to support the application of chemical engineering principles.
K2	Demonstrate knowledge and understanding of scientific principles underpinning chemical engineering systems.
K3	Describe, explain and use chemical engineering principles to produce solutions to defined chemical engineering applications.
K4	Demonstrate knowledge and understanding of the management techniques involved in process design.
K5	Demonstrate an awareness of how simple chemical engineering elements combine as a system.
K6	Identify relevant engineering analysis techniques and use them in well-defined chemical engineering applications.
<b>K</b> 7	Describe and explain workshop/laboratory practice.
Cognit	ive/Intellectual Skills (insert additional rows as necessary)
C1	Select and apply computer based methods for simulating chemical engineering systems and design solutions within defined context.
C2	Apply suitable tools to enable measurement and testing of well-defined chemical engineering systems and design solutions.
C3	Use manufacturer's data sheets and justify the use of particular equipment for well-defined problems involving chemical engineering systems.
C4	Gather, record and describe, with guidance, measurement and test data from practical tests or the simulation of design solutions to chemical engineering applications.
C5	Demonstrate an awareness of a variety of possible design solutions appropriate to practical applications.
Practic	al/Professional Skills (insert additional rows as necessary)

P1	Able to act with limited autonomy under supervision to produce solutions that integrate knowledge of mathematics, science, information technology, design, business context and chemical engineering practice to solve routine problems.		
P2	Ability to use appropriate codes of practice and industry standards within defined guidelines.		
Key Tr	ansferable Skills (insert additional rows as necessary)		
T1	Communicate appropriately and identify and use writing skills appropriate to the chemical engineering industry.		
T2	Use a defined set of technological equipment and systems appropriate to the discipline.		
Т3	Demonstrate numerical and statistical skills in simple contexts appropriate to the discipline.		

### **Appendix 2: Assessment Schedule – Typical HNC in Chemical Engineering**

Note: This is for guidance only and unless advised otherwise at the start of the module, you should be aiming to complete an assessment every 3-4 weeks and ALL assessments associated with the module within 15 weeks from start of module.

Block 1	Analytical Methods for Engineers	One single component of assessment, comprising <b>four</b> elements, in the form of an in-course assessment. Each assessment is equally weighted and comprises a set of, on average 5-10 short answer questions Element 1 will focus on Algebraic methods Element 2 will focus on trigonometric methods Element 3 will focus on calculus Element 4 will focus on statistics	Mass Energy Balance	Evidence will be provided from a single component of assessment, comprising four equally weighted elements, in the form of an in- course assessment Element 1, 2, 3 and 4 consists of a small number of questions which require a blend of short descriptive answers including the reproduction of diagrams; numerical calculations requiring the interpretation of technical descriptions and the identification and use of relevant formulae, tables and charts.
Block 1	Chemical Unit Operations	Evidence will be provided from a single Element 1, 2, 3 and 4 consists of a small number of questions which require a blend of short descriptive answers including the reproduction of diagrams; numerical calculations requiring the interpretation of technical descriptions and the identification and use of relevant formulae, tables and charts.		

		Element 1 will focus upon heat transfer in evaporation processes. Evaporation equipment and their operation Element 2 will focus upon crystallisation processes and equipment Element 3 will focus on drying processes and equipment		
Block 2	Fluid Mechanics	Evidence will be provided from a single component of assessment, comprising three elements, equally weighted, in the form of an in-course assessment. Each assessment comprises a set of, on average 5-10 short answer questions which are related to the sequence and content of the lessons provided within the learning materials	Materials Engineering	Evidence will be provided from a single component of assessment, comprising three elements equally weighted. These will take the form of a series of 5- 10 short answer questions. It will assess your ability to select and apply the appropriate method for the solution of problems relating to materials engineering.
		Element 1 will focus on the theory of viscosity in fluids Element 2 will focus on static fluid systems and the flow of real fluids Element 3 will focus on the principles and applications of hydraulic machines		Element 1 will cover the properties of materials Element 2 will address the relationship between manufacturing process and materials behaviour Element 3 will cover the failure of materials
Block 3	Heat Transfer and Combustion	Assessment consists of a small number of questions which require a blend of short descriptive answers including the reproduction of diagrams; numerical calculations requiring the interpretation of technical descriptions and the identification and use of relevant formulae, tables and charts.	Mass Transfer Operations	Elements 1, 2 3 and 4 consist of a small number of questions (typically 4-6) which require a blend of short descriptive answers including the reproduction of diagrams; numerical calculations requiring the interpretation of technical descriptions and the identification and use of relevant formulae, tables and charts.
		Element 1 will focus upon heat transfer by conduction and modes of heat transfer		In addition, element 1 also involves a small industrial based case study (typically 100-200

		Element 2 will focus upon overall heat transfer rates Element 3 will focus on heat exchangers Element 4 will focus on combustion processes	words) via which the student can demonstrate the application of knowledge gained to-date in this module
Block P	Project	One single component of assessment comprising <b>three</b> equally weighted elements: Element 1 comprises a logbook or project diary documenting the progress of the project on a periodic basis Element 2 comprises a project report of approximately 3000 words Element 3 oral presentation of the project 5-10 minutes	

### Appendix 3: Module Leaders contact details

### TUOL(E) MODULES 2014/5

Module Code	Module Name	Level	Tutor Name	Phone No	Email
1020COL-N	Analytical Instrumentation (By Flexible Open Learning)	4	Stephen Brown	+44 (0)1642 384444	s.brown@tees.ac.uk
1021COL-N	Analytical Methods For Engineers (By Flexible Open Learning)	4	David Wishart	+44 (0)1642 738215	d.wishart@tees.ac.uk
1019COL-N	Applications Of Pneumatics And Hydraulics (By Flexible Open Learning)	4	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk
2037COL-N	Business Management Techniques (By Flexible Open Learning)	5	Stephen Brown	+44 (0)1642 384444	S.brown@tees.ac.uk
1017COL-N	Chemical Engineering Unit Operations (By Flexible Open Learning)	4	Stephen Brown	+44 (0)1642 384444	S.brown@tees.ac.uk
2035COL-N	Combinational And Sequential Logic (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk
2034COL-N	Control Systems And Automation (By Flexible Open Learning) Not available to students studying HNC/D Mechanical Engineering	5	David Peel	+44 (0)1642 342731	d.peel@tees.ac.uk
1016COL-N	Digital And Analogue Devices And Circuits (By Flexible Open Learning)	4	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk
1015COL-N	Distributed Control Systems (By Flexible Open Learning)	4	Neville Winter	+44 (0)1642 342476	n.winter@tees.ac.uk
2032COL-N	Electrical And Electronic Principles (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk
1014COL-N	Electrical Machines (By Flexible Open Learning)	4	Gobind Pillai	+44 (0)1642 342500	g.g.pillai@tees.ac.uk
2029COL-N	Electrical Supply And Distribution (By Flexible Open Learning)	5	Gobind Pillai	+44 (0)1642 342500	g.g.pillai@tees.ac.uk
2028COL-N	Electrical Systems Protection (By Flexible Open Learning)	5	Gobind Pillai	+44 (0)1642 342500	g.g.pillai@tees.ac.uk
2027COL-N	Electromagnetic Compatibility (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk
2026COL-N	Electronics (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk
1012COL-N	Engineering Applications (By Flexible Open Learning)	4	Neville Winter (E&E I&C) David Craddock (Mechanical)	+44 (0)1642 342476 +44 (0)1642 342559	n.winter@tees.ac.uk d.craddock@tees.ac.uk
2024COL-N	Engineering Design (By Flexible Open Learning)	5	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk
1011COL-N	Engineering Science (By Flexible Open Learning)	4	David Wishart	+44 (0)1642 738215	d.wishart@tees.ac.uk
2022COL-N	Engineering Thermodynamics (By Flexible Open Learning)	5	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk
1023COL-N	Fluid Mechanics (By Flexible Open Learning)	4	David Craddock	+44 (0)1642 342599	d.craddock@tees.ac.uk
1009COL-N	Heat Transfer And Combustion (By Flexible Open Learning)	4	Riyadh AlAllaq (Alpha)	+44 (0)1642 342731	R.AIAllaq@tees.ac.uk
2019COL-N	Instrumentation And Control Principles (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk
1007COL-N	Mass And Energy Balance (By Flexible Open Learning)	4	Riyadh AlAllaq (Alpha)	+44 (0)1642 342731	R.AlAllaq@tees.ac.uk
2016COL-N	Mass Transfer Operations (By Flexible Open Learning)	5	Riyadh AlAllaq (Alpha)	+44 (0)1642 342731	R.AIAllaq@tees.ac.uk

1006COL-N	Materials Engineering (By Flexible Open Learning)	4	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk	
1022COL-N	Measurement Of Process Variables (By Flexible Open Learning)	4	Stephen Brown	+44 (0)1642 384444	s.brown@tees.ac.uk	
2013COL-N	Mechanical Principles (By Flexible Open Learning)	5	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk	
1005COL-N	Mechatronic System Principles (By Flexible Open Learning)	4	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk	
1004COL-N	Microprocessor Systems (By Flexible Open Learning)	4	Not Yet Available			
2010COL-N	Operational Amplifiers (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk	
2008COL-N	Petroleum Processing Engineering (By Flexible Open Learning)	5	Riyadh AlAllaq (Alpha)	+44 (0)1642 342731	R.AIAllaq@tees.ac.uk	
1002COL-N	Petroleum Production Engineering (By Flexible Open Learning)	4	Not Yet Available			
2006COL-N	Petroleum Refinery Engineering (By Flexible Open Learning)	5	Riyadh AlAllaq (Alpha)	+44 (0)1642 342731	R.AIAllaq@tees.ac.uk	
2005COL-N	Plant Services (By Flexible Open Learning)	5	David Craddock	+44 (0)1642 342559	d.craddock@tees.ac.uk	
1001COL-N	Programmable Logic Controllers (By Flexible Open Learning)	4	Neville Winter	+44 (0)1642 342476	n.winter@tees.ac.uk	
2003COL-N	Project (By Flexible Open Learning)	5	All tutors			
2002COL-N	Safety Engineering (By Flexible Open Learning)	5	Stephen Brown	+44 (0)1642 384444	S.brown@tees.ac.uk	
2001COL-N	Semiconductor Physical Electronics (By Flexible Open Learning)	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk	
1028COL-N	Semiconductor Structure & Fabrication (By Flexible Open Learning)	4	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk	
2039COL-N	Statistical Process Control	5	Derek Casson	+44 (0)1642 342526	d.casson@tees.ac.uk	
COL0001-N	Foundation Mathematics for Engineers		Seibu Jacob	+44 (0)1642 342585	S.Jacob@tees.ac.uk	
COL0002-N	Foundation Petroleum Chemistry		Angela Waldock	+44 (0)1642 738204	A.Waldock@tees.ac.uk	
		1	* Not Vet Available but will be in the future. Please check with tutor/Admin			

\* Not Yet Available but will be in the future. Please check with tutor/Admin

### **Appendix 4: Edexcel – Grading Higher National Units**

Each module will be graded as a pass, merit or distinction.

A pass is awarded for the achievement of all outcomes against the assessment criteria specified in the module

Merit and distinction grades are awarded for higher-level achievement.

Edexcel (the awarding body) give generic merit and distinction grade descriptors used by tutors for grading the total evidence produced for each module and describe the student's performance over and above that for a pass grade.

#### **Grade descriptors**

#### Pass grade

A pass grade is achieved by meeting all the requirements defined in the assessment criteria for pass for each unit.

#### **Merit grade**

MERIT DESCRIPTORS	INDICATIVE CHARACTERISTICS			
In order to achieve a <b>merit</b> the learner must:	The student's evidence shows:			
1. identify and apply strategies to find appropriate solutions	<ul> <li>effective judgements have been made</li> <li>complex problems with more than one variable have been explored</li> <li>an effective approach to study and research has been applied</li> </ul>			
2. select/design and apply appropriate methods/ techniques	<ul> <li>relevant theories and techniques have been applied</li> <li>a range of methods and techniques have been applied</li> <li>a range of sources of information has been used</li> <li>the selection of methods and techniques/sources has been justified</li> <li>the design of methods/techniques has been justified</li> <li>complex information/data has been synthesised and processed</li> <li>appropriate learning methods/techniques have been applied</li> </ul>			
3. present and	the appropriate structure and approach has been used			

communicate	coherent, logical development of principles/concepts for the
appropriate findings	intended audience
	<ul> <li>a range of methods of presentation have been used and</li> </ul>
	technical language has been accurately used
	<ul> <li>communication has taken place in familiar and unfamiliar contexts</li> </ul>
	• the communication is appropriate for familiar and unfamiliar audiences and appropriate media have been used

### **Distinction grade**

DISTINCTION DESCRIPTORS	INDICATIVE CHARACTERISTICS				
In order to achieve a distinction the learner must:	The learner's evidence shows:				
1. use critical reflection to evaluate own work and justify valid conclusions	<ul> <li>conclusions have been arrived at through synthesis of ideas and have been justified</li> <li>the validity of results has been evaluated using defined criteria</li> <li>self-criticism of approach has taken place</li> <li>realistic improvements have been proposed against defined characteristics for success</li> </ul>				
2. take responsibility for managing and organising activities	<ul> <li>autonomy/independence has been demonstrated</li> <li>substantial activities, projects or investigations have been planned, managed and organised</li> <li>activities have been managed</li> <li>the unforeseen has been accommodated</li> <li>the importance of interdependence has been recognised and achieved</li> </ul>				
3. demonstrate convergent/lateral/ creative thinking	<ul> <li>ideas have been generated and decisions taken</li> <li>self-evaluation has taken place</li> <li>convergent and lateral thinking have been applied</li> <li>problems have been solved</li> <li>innovation and creative thought have been applied</li> <li>receptiveness to new ideas is evident</li> <li>effective thinking has taken place in unfamiliar context</li> </ul>				

### **Appendix 5 – Short Extension**



Please date stamp:

# ASSIGNMENT SUBMISSION: Short Extension Request

A **Short Extension** is for up to and including 7 days and is usually for one module only. A **Long Extension** is up to the end of the academic year/ end of resit-period and is normally only offered to Full-Time students. A **Deferred Submission** is up to one calendar year from original submission date, normally only available to Part-Time students

Surname:			Forenam	ne(s):				
Programme/Course Name:								
Mode of Study: F (Circle as appropriate)	T PT	Year of Stud 4 5 6 (Circle as appropri	-	-	: 1 2 as appropriate)	2 3		
Student No:			Academic Ye	ar:				
Reason for Extension	on:							
If you cannot meet an assessment deadline you are strongly advised to seek advice from a member of academic staff, as soon as possible. Please give the name of the member of staff who advised you:								
Staff Name:	Staff Name: Date:							
Type of Assessment (for example Assignment, Exam, Report, Presentation)	Assessment (for example signment, Exam, Report,			Module Code	Original Assessment Deadline Date	Agreed Extension Date		

Student's Signature:	This form must be approved by the Module Leader.Evidence supplied?YesNo(Circle as appropriate)ApproveDo Not Approve(Circle as appropriate)
Date:	Name:

#### GENERAL GUIDANCE ON APPLYING FOR AN ASSESSMENT EXTENSION

If you cannot meet an assessment deadline you are strongly advised to seek advice from a member of academic staff, as soon as possible.

When discussing the extension(s), students and staff are asked to refer to the detailed guidance on selecting the appropriate extension length, which is available from the University's website. In summary:

- A **Short Extension** is for up to and including 7 days and is usually for one module only. It must be approved by either the Module Leader.
- A Long Extension is up to the end of the academic year/ end of resit-period and is normally only offered to Full-Time students. It must be approved by the relevant Programme Manager (or in his / her absence, the Assistant Dean Academic Quality, Learning and Teaching).
- A Deferred Submission is up to one calendar year from original submission date, normally only available to Part-Time students. It must be approved by the relevant Programme Manager (or in his / her absence, the Assistant Dean Academic Quality, Learning and Teaching).

When filling in the form, please give details of *each* assessment for which you are seeking an extension, not just the overall module.

**School Specific Guidance** 

Please hand the Extension Request Form in to:

Science & Engineering School Office, IC0.01

#### Teesside University School of

**Official Receipt of Extension Request** 

This confirms that a request for a Short Extension was received from

Student Name: .....

Date: .....

By (School Staff Name): .....

### **Appendix 6 – Long Extension**



Please date stamp:

# ASSIGNMENT SUBMISSION: Long Extension Request

A **Short Extension** is for up to and including 7 days and is usually for one module only. A **Long Extension** is up to the end of the academic year/ end of resit-period and is normally only offered to Full-Time students. A **Deferred Submission** is up to one calendar year from original submission date, normally only available to Part-Time students

Surname:			Forename( s)			
Programme/Course Name:	)					
Mode of Study: F	Year of Stud 4 (Circle as appropri	-	3 <b>Term:</b> 1 2 3 (Circle as appropriate)			
Student No:			Academic Ye	ar:		
Reason for Extensi	on:					
Have you supplied	evidence with	this applicatio	on?: Yes/No If	not, plea	se say why:	
If you cannot meet of academic staff (r role of the member	nodule or prog	gramme leader				
Staff Name:		Role:				Date:
Type of Assessment (for example Assignment, Exam, Report, Presentation)		Module Title		Module Code	Original Assessment Deadline Date	Agreed Extension Date

Date:					
Student's Signature:	Programme Manager Name: Approve Do Not Approve (Circle as appropriate) Signed:				
	· · · · ·		, , , , , , , , , , , , , , , , , , ,		

#### GENERAL GUIDANCE ON APPLYING FOR AN ASSESSMENT EXTENSION

If you cannot meet an assessment deadline you are strongly advised to seek advice from a member of academic staff, as soon as possible.

When discussing the extension(s), students and staff are asked to refer to the detailed guidance on selecting the appropriate extension length, which is available from the University's website. In summary:

- A *Short Extension* is for up to and including 7 days and is usually for one module only. It must be approved by either the Module Leader.
- A Long Extension is up to the end of the academic year/ end of resit-period and is normally only offered to Full-Time students. It must be approved by the relevant Programme Manager (or in his / her absence, the Assistant Dean – Academic Quality, Learning and Teaching).
- A Deferred Submission is up to one calendar year from original submission date, normally only available to Part-Time students. It must be approved by the relevant Programme Manager (or in his / her absence, the Assistant Dean – Academic Quality, Learning and Teaching).

When filling in the form, please give details of *each* assessment for which you are seeking an extension, not just the overall module.

#### **School Specific Guidance**

Please hand the Extension Request Form in to: School of Science & Engineering, School Office, IC0.01

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#### **Official Receipt of Extension Request**

This confirms that a request for a Long Extension was received from

Student Name: .....

Date: .....

By (School Staff Name): .....