



Northumbria University Programme Framework for Northumbria Awards - Module Specification

Faculty	Engineering and Environment	Department	BEng (Hons) Mechanical Engineering (Manufacturing Systems and Design), SeoulTech		Subject		Module Tutor	Hyonchu OH		
Module Title	Professional Communications for Engineers I (MSDE 290)						Module Code	MSDE 290		
Module Type* (see key below)	STAN									
Module size credits	Level 3:		Level 4:	10	Level 5:		Level 6:		Level 7:	
Home programme/s for which the module is designed				BEng (Hons) Mechanical Engineering (Manufacturing Systems and Design), SeoulTech			Code/s			
Additional Programme/s other than that/those for which the module for specifically designed							Code/s			
Delivery Pattern (Please tick)		Semester based (please specify)		Sem 1 ☒ Sem 2 ☐		Year Long	☐	Full-time Part-time Distance Learning		☐ ☒ ☐
Location(s) of delivery: If delivered at EPWO partners please give partner name and location							SeoulTech, Korea (ROK)			

***KEY:**

APL Accreditation for prior learning
CORE PNVQ core skills module
DISS Dissertation
FLDW Fieldwork
INDS Independent study
MAFOUN MA foundation modules - ASS

P/F Pass/fail module
P/F_DS Pass/fail dissertation module
P/F_PJ Pass/fail project module
P/F_PL Pass/fail placement module
PLAY Placement – academic study abroad FT
PLCL Placement – Clinical

PLIN Placement - Industrial
PRAC Practical
PROJ Project
STAN Standard module
WKBS Work base study
WORK Workshop



Module Overview (Max 250 words per section) (This section is aimed at providing a prospective or current student with a brief overview of the module in answer to the specific questions and will form an element of the module handbook)

What will I learn on this module? (SRS 0001) Please give a brief indication of the content of the module including the main topic / subject areas studied

On this module, students will acquire a comprehensive understanding of the foundational principles underpinning effective English communication, focusing extensively on the art of delivering persuasive oral presentations and crafting well-structured, compelling written reports. Alongside this, they will develop essential study skills tailored to the unique demands of learning in an English-language academic setting. This comprehensive knowledge and skill set will enable students to effectively communicate and excel in both their academic and future professional endeavours.

How will I learn on this module? (SRS 0002) Please provide a brief overview the learning and teaching approaches the student can expect to experience.

Learning on this module will be facilitated primarily through a dynamic and interactive approach. Classroom activities will centre around collaborative team work, with small group discussions to explore communication strategies. These discussions will be followed by presentations of ideas to the entire class, leading to engaging debates. Additionally, students will participate in hands-on exercises and coursework that will enhance their practical communication and presentation skills.

How will I be supported academically on this module? (SRS 0003) Please provide a brief overview of the academic support available to students, including any support that may be accessed outside formal scheduled teaching.

Academic support will be provided through various channels. Students will receive valuable written feedback on their written projects and presentations, offering insights for improvement. The module tutor will also provide both written and verbal feedback on presentations, while peer review processes will further contribute to the academic growth of students. Additionally, the classroom environment will foster peer learning and collaboration, creating a supportive academic community.

What will I be expected to read on this module? (SRS 0004) All modules at Northumbria include a range of reading materials that students are expected to engage with. The reading list for this module can be found at: <http://readinglists.northumbria.ac.uk>

(Reading List service online guide for academic staff, this contains contact details for the Reading List team – <http://library.northumbria.ac.uk/readinglists>)

Northumbria University Library Reading List Service (please confirm the following)	Please give date added
A draft reading list has been created and on the university Library Reading List Service	Click here to enter a date.
Reading material has been acquired and digitised (following approval)	Click here to enter a date.
Reading list has been published to students (for module delivery)	Click here to enter a date.

NB – for PFNA alignment process only, module authors should complete either the University Library e-Reading List, or Appendix 1.



Module Learning Outcomes (MLOs) *(Max of five in total*, for standard 20-credit modules)*
**this can increase to a maximum of 10, for modules with more than 20 credits*

<u>What will I be expected to achieve?</u> (SRS 0005) Knowledge & Understanding: - MLO1: Select and evaluate technical literature and other sources of information to address complex problems. Intellectual / Professional skills & abilities: - MLO2: Communicate effectively on complex engineering matters with technical and non-technical audiences. Personal Values Attributes (Global / Cultural awareness, Ethics, Curiosity) (PVA): - MLO3: Describe standard solutions to benefit society by applying sound engineering practise with an awareness of ethical considerations.	<u>How will I be assessed?</u> (SRS 0006) <i>Please give details of all formative and summative assessment process indicating which MLOs will be addressed and how feedback will be provided.</i> Formative Assessment Academic staff will provide formative feedback during scheduled teaching sessions to enhance your understanding of theoretical and professional concepts, boost your confidence, and prepare you for summative assessment. Summative Assessment Academic staff on the module will assess you in a summative manner by three pieces of assessment: Component 1, Resume: a professional resume of no more than two pages, tailored to a hypothetical engineering internship, assessed on relevance, content, organisation and professionalism. Component 2, Group Project (Report and Presentation): in groups, carry out an environmental audit of a simple product and present the findings in a Harvard-referenced report and a ten-minute group presentation. Component 3, Individual Presentation: a five-minute presentation on a technical or environmental subject, assessed on subject knowledge, delivery, timing and use of visual prompts. Feedback is given verbally and in writing.	<u>Programme (Level) Learning Outcomes that this module contributes to:</u> <i>[Please insert PLO number as listed on the programme specification]</i> Knowledge & Understanding: - KU3: Identify and utilise basic methodologies to create solutions to specific engineering problems. - KU4: Define and investigate complex problems and constraints that occur in engineering design with the aid of advanced tools. Intellectual / Professional skills & abilities: - IPSA2: Communicate established engineering concepts to expert and non-expert audiences using standard formats and media. - IPSA3: Recognise health and safety, sustainability, and environmental issues in the engineering sector. Personal Values Attributes (Global / Cultural awareness, Ethics, Curiosity) (PVA): - PVA1: Describe standard solutions to benefit society by applying sound engineering practise with an awareness of ethical considerations. - PVA3: Able to evaluate how sustainable engineering techniques may be applied to engineering systems and products
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Pre-requisite(s) (SRS 0007) Any module which must already have been taken, or any stipulated level of prior knowledge required in order to study this module, (co-requisite core models need not be listed)	Pass English Language test (writing and speaking/listening) at level 3 with a minimum of 40% (Grade D)
Co-requisite(s) (SRS 0008) Modules at this level which must be taken with this module	

Module abstract (SRS 0009)

Please provide a brief a brief abstract of the module (150 words max). This section acts as the 'shop window' for the module, therefore it needs to engage and inspire the student. This is the first thing that the student will read about this module, so it must immediately grab their attention. The main aim is to encourage the student to read on, however the summary should be written in such a way that if the student reads nothing else this section will convey all key messages and benefits that the module will offer. Start by explaining the module title where necessary. Then highlight any selling points relating to the four pillars: Research-Rich Learning; Technology Enhanced Learning; Assessment and Feedback; Employability and Entrepreneurship. Examples may include student satisfaction rates, learning environment, state-of-the-art facilities etc. Finally indicate benefits of the module such as the key skills that the students will gain for future employment and career paths that are open to them.

Embark on a transformative journey with our Professional Communications for Engineers I module, your key to a successful engineering career. This course is designed to master the art of effective English communication, with a special focus on crucial skills in oral presentations and report writing.

You'll immerse yourself in real-world engineering scenarios, honing strategies to engage diverse audiences, organize complex information, and deliver compelling work. Experience an engaging learning environment with collaborative classroom activities that cultivate practical communication and presentation skills.

Your progress will be assessed through written projects and presentations, offered as both group and individual tasks, with comprehensive written and verbal feedback from experienced tutors and peers.

Acquire highly sought-after skills that will not only enrich your academic journey but also set the stage for a successful engineering career. Prepare to excel, enhance your employability, and unlock a world of opportunities within the engineering sector through this module.

Programme Framework for Northumbria Awards Research Rich Learning Design Pillar (SRS 0090)

Embedding Research Rich Learning into the curriculum: Indicate how students will be actively engaged in research rich learning in this module through: research/enquiry based learning, research tutored learning, research led learning and/or research oriented learning, providing a brief overview of how this / these will feature within the delivery of the module (250 words max)

Note:

- **Research/enquiry Based:** L&T Based on student-centred enquiry and research activities (conducting research).
- **Research Tutored:** L&T Emphasises learning focused on students actively discussing research, and critically engaging with research outputs



- **Research Led:** T&L structured around subject content and that content is based on the research (learning about research)
- **Research Orientated:** T&L Emphasises understanding of the knowledge production process, and methods of enquiry in the subject (learning how to research)

The module immerses students in research-rich learning by actively involving them in conducting research for real-world engineering communication scenarios. This practical approach enhances communication skills and understanding. Through research tutored learning, students critically engage with research outputs, gaining insights into effective communication practices. The curriculum is research-led, aligning content with research findings applicable to engineering. Additionally, it's research-oriented, emphasizing knowledge of the knowledge production process and research methods for professional engineering communication. This equips students with valuable skills for successful engineering careers.



Notional Student Workload (NSW) for each mode of delivery

Complete for each delivery mode where the distribution of NSW Full Time Mode of Delivery				Part Time Mode of Delivery			
Activity type	Hours	KIS category	KIS category hours		Hours	KIS category	KIS category hours
Lecture	30	Scheduled	70	Lecture		Scheduled	
Seminar				Seminar			
Tutorial	15			Tutorial			
Project Supervision				Project Supervision			
Demonstration	10			Demonstration			
Practical classes and workshops	15			Practical classes and workshops			
Supervised time in studio/ workshop				Supervised time in studio/ workshop			
Fieldwork				Fieldwork			
External visits				External visits			
Tutor guided independent learning	10	Independent	30	Tutor guided independent learning		Independent	
Student independent learning	20			Student independent learning			
Placement		Placement	0	Placement		Placement	
Study abroad				Study abroad			
Work based learning				Work based learning			
Total workload 200 hours for 20 credit module	100		100	Total workload			



Summative Assessment

Sequence 001, 002 etc.	Activity type <i>indicate ONE of the following types:</i>	Brief description of assessment (max.120 characters) <i>e.g. type/ length of exam, type/ word limit of coursework</i>	Weighting % or Pass/Fail (for grade only components) <i>Note: % weightings should add up to 100% for module overall</i>	Final assessment		Anonymous submission		ESAF submission	
				Yes	No	Yes	No	Yes	No
001	CW (Coursework)	Resume	25	☐	☒	☐	☒	☐	☒
002	CW (Coursework)	Final group Report/ Presentation	50	☒	☐	☐	☒	☐	☒
003	PRE (Presentation)	Individual Presentation	25	☐	☒	☐	☒	☐	☒
004	Choose an item.			☐	☐	☐	☐	☐	☐
005	Choose an item.			☐	☐	☐	☐	☐	☐
006	Choose an item.			☐	☐	☐	☐	☐	☐
007	Choose an item.			☐	☐	☐	☐	☐	☐
008	Choose an item.			☐	☐	☐	☐	☐	☐
009	Choose an item.			☐	☐	☐	☐	☐	☐
010	Choose an item.			☐	☐	☐	☐	☐	☐
011	Choose an item.			☐	☐	☐	☐	☐	☐
012	Choose an item.			☐	☐	☐	☐	☐	☐

Reassessment (specify either synoptic or non-synoptic)

Synoptic reassessment <i>One form of reassessment that tests all module learning outcomes</i>	Yes	☐	No	☒
Non-synoptic reassessment <i>Where module referred overall, individual failed components of assessment are reassessed</i>	Yes	☒	No	☐

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Date of FPARSC Approval
[Click here to enter a date.](#)

Date of entry onto SITS	Click here to enter a date.		
<u>LOG OF CHANGES POST-APPROVAL</u>			
Please indicate any changes to the approved module descriptor from 2012/13 onwards			
Section No.	Brief description of change	Date of Approval	Semester and year of first implementation
		Click here to enter a date.	
		Click here to enter a date.	
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		Click here to enter a date.	

Appendix 1

Indicative Reading for PFNA alignment approval only *(to be completed only if e-reading list unavailable at point of alignment approval)*

N.B. This outline indicative reading list will be utilised for approval purposes only, and **a full e-reading list must be produced and available by the June of the academic year prior to the first delivery date of the module** (at which point the section of p.2 referring to University Library Reading Lists should be completed).

Please list below essential key text underpinning the module content and ultimately the learning outcomes:

- 1) Hirsch, H. L., (2002) Essential Communication Strategies For Scientists, Engineers and Technology Professionals", 2nd Ed., Pub. Wiley Interscience, ISBN 0-471-27317-1.
- 2) Pears, R. (2005) Cite them right: the essential guide to referencing and plagiarism. Pear Tree Books.
- 3) Sustainability in Engineering Design: Johnson and Gibson: 2014