

Northumbria University Programme Framework for Northumbria Awards - Module Specification

Faculty	Engineering and Environment	i		BEng (Hons) Mechanical Engineering (Manufacturing Systems and Design), SeoulTech	Subject			ule Tutor	Hyonchu C	
Module Title Module	STAN	Communica	itions for Engin	eers I (MSDE 290))		IVIOC	ule Code	MSDE 290	
Type* (see key below)										
Module size credits	Level 3:		Level 4:	10	Level 5:	Le	evel 6:		Level 7:	
					echanical Engi	•		Code/s		
designed				(Manufacturing Systems and Design), SeoulTech			ech			
Additional Programme/s other than that/those for which the module for specifically designed								Code/s		
					Veerlens			Full times		N 2
Delivery Pattern (Please tick) Semester			Sem 1 ⊠	Year Long			Full-time Part-time			
based (please							Distance L	earning		
	(please Sem 2 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 P/F CORE PNVQ core skills module P/F DISS Dissertation P/F FLDW Fieldwork P/F INDS Independent study MAFOUN MA foundation modules - ASS		_DS Pass/fail disser _PJ Pass/fail projec _PL Pass/fail placer _Y Placement – ac	rtation module at module ment module cademic study abro		AC F OJ F AN S KBS V	Placement - Indus Practical Project Itandard module Vork base study Vorkshop	rtrial			



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)

Tredaing List service crimine goldener deddernie stant, this certificate derdies for the reading List reality	ilibrary: Horritorria: ac.ok/rodairigiists/
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

What will I be expected to achieve? (SRS 0005)

- C4: Select and evaluate technical literature and other sources of information to address complex problems.
- C17: Communicate effectively on complex engineering matters with technical and non-technical audiences.

How will I be assessed? (SRS 0006)

Please give details of all formative and summative assessment process indicating which MLOs will be addressed and how feedback will be provided.

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, Practice individual presentations offer verbal feedback to improve your communication of complex engineering topics.

Component 2, Formative exercises enhance your English language skills, with verbal and written feedback to address specific areas for improvement.

Component 3, The final assessment involves a group project, including report writing and a presentation, to evaluate your ability to select and evaluate technical literature and effectively communicate complex engineering matters. Feedback is provided through returned assignments with written comments and suggestions.

<u>Programme (Level) Learning Outcomes</u> <u>that this module contributes to</u>:

[Please insert PLO number as listed on the programme specification]

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



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 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

Lecture 3 Seminar Tutorial 1 Project Supervision Demonstration 1 Practical classes and workshops 1 Supervised time in studio/ workshop Fieldwork External visits 1 Tutor guided independent learning 1	30 15 10 15	KIS category Scheduled	KIS category hours 70	Lecture Seminar Tutorial Project Supervision Demonstration	Hours	KIS category Scheduled	KIS category hours
Seminar Tutorial 1 Project Supervision Demonstration 1 Practical classes and workshops 1 Supervised time in studio/ workshop Fieldwork External visits 1 Tutor guided independent learning 1	15 10	Scheduled	hours	Seminar Tutorial Project Supervision Demonstration		Scheduled	Hours
Seminar Tutorial 1 Project Supervision Demonstration 1 Practical classes and workshops 1 Supervised time in studio/ workshop Fieldwork External visits 1 Tutor guided independent learning 1	15 10	Scheduled		Seminar Tutorial Project Supervision Demonstration		Scheduled	
Tutorial 1 Project Supervision 1 Demonstration 1 Practical classes and workshops 1 Supervised time in studio/ workshop Fieldwork 1 External visits 1 Tutor guided independent learning 1	10			Tutorial Project Supervision Demonstration			
Project Supervision Demonstration 1 Practical classes and workshops 1 Supervised time in studio/ workshop Fieldwork External visits 1 Tutor guided independent learning 1	10			Project Supervision Demonstration		- - -	
Demonstration 1 Practical classes and workshops 1 Supervised time in studio/ workshop Fieldwork External visits 1 Tutor guided independent learning 1				Demonstration			
Practical classes and workshops Supervised time in studio/ workshop Fieldwork External visits Tutor guided independent learning							1
Supervised time in studio/ workshop Fieldwork External visits Tutor guided independent learning	15						
Fieldwork External visits Tutor guided independent learning 1				Practical classes and workshops			
External visits Tutor guided independent learning 1				Supervised time in studio/ workshop			
Tutor guided independent learning 1				Fieldwork			
3 1 3				External visits			
Student independent learning 2	10	Independent	30	Tutor guided independent learning		Independent	
	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 <i>001, 002</i>	Activity type indicate ONE of the following types:	Brief description of assessment (max.120	ssessment (max.120 % or Pass/Fail (for grade		Final assessment		Anonymous submission		ESAF submission	
etc.		characters) e.g. type/ length of exam, type/ word limit of coursework	only components) Note: % weightings should add up to 100% for module overall	Yes	No	Yes	No	Yes	No	
001	CW (Coursework)	Resume	25		\boxtimes					
002	CW (Coursework)	Final group Report/ Presentation	50				\boxtimes			
003	PRE (Presentation)	Individual Presentation	25		\boxtimes		\boxtimes			
004	Choose an item.									
005	Choose an item.									
006	Choose an item.									
007	Choose an item.									
800	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 One form of reassessment that tests all module learning outcomes	Yes		No	\boxtimes
Non-synoptic reassessment Where module referred overall, individual failed components of assessment are reassessed	Yes	\boxtimes	No	



FOR OFFICE USE ONLY

Date of FPARSC Approval	Click here to enter a date.	

Date of entry onto SITS	Click here to enter a date.
-------------------------	-----------------------------

LOG OF CHANGES POST-APPROVAL

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.		
		Click here to enter a date.		
		Click here to enter a date.		
		Click here to enter a date.		
		Click here to enter a date.		
		Click here to enter a date.		
		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