ENGINEERING PF

SCHOOL OF ENGINEERING Fakultät für Technik Hochschule Pforzheim



Syllabus LAN1602 English for Engineers

Rafael Correa

Winter Semester 2024/25

Level	Bachelor		
Credits	2		
Student Contact Hours	2		
Workload	60 hours		
Prerequisites	Students should have a good command of the English language. (Level B2/C1 according to the CEFR for languages)		
Time	s. LSF		
Room	s. LSF		
Start Date	s. LSF		
Lecturer(s)	Name	Rafael Correa	
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	Office Hours	By prior arrangement	
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Summary

Our students will be expected to perform a wide variety of technical and business management functions in nationally and internationally operating companies. They will have to liaise within different business and technical fields. Therefore, a high level of English is required to enable them to communicate effectively.

This course aims to facilitate both oral and written communication within an engineering and business context. Students have the opportunity to consolidate the skills they learned in Business English 1 as well as to extend their knowledge of topics relating to engineering processes.

Outline of the Course

Engineering projects

Product development/innovation/engineering design
Materials technology
Production and manufacturing processes
Energy storage
Sustainable energies
Logistics
Diagrams
Industry 4.0
Lean production/management cases
Experiments

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes			
	After completion of the program the students will be able	After completion of the course the students will be able			
1	Expert Knowledge				
1.1	to demonstrate their solid key knowledge in Technical Basics.	to discuss, describe and explain technical topics in the English language.			
2	Digital Skills				
2.3	to effectively use digital technologies to interact, to collaborate and to communicate.	to use virtual communication applications such as Alfaview and are able to participate in discussions and perform presentations remotely.			
3	Critical Thinking and Analytical Competence				
3.2	to critically reflect and interpret findings and to develop comprehensive solutions for complex problems.	to make a critical assessment of current and future technologies, taking their technical, social and environmental challenges into consideration.			
4	Ethical Awareness				
	to develop sound strategies in the areas of ethics, sustainable development and social responsibility and are able to apply them to typical economic decision-making problems.	to analyze and present issues relating to sustainable development and corporate social responsibility.			
5	Communication and Collaboration Skills				
5.1	to express complex issues effectively in writing.	use their written language skills related but not limited to production processes, graphs and charts, technical and laboratory reports.			
5.2	to demonstrate their oral communication skills in presentations.	to present topics related to current technology development in appropriate oral form in discussions, simulations and presentations.			
5.3	to work successfully in a team by performing practical tasks.	to prepare and present results of group work as a team.			
6	Internationalization				
6.2	to articulate themselves in a professional manner in international business.	to participate in discussions and presentations relating to the role of technology both nationally and internationally.			

Teaching and Learning Approach

The course will be run as a seminar with an interactive approach. All students will be expected to make an active contribution to group discussions, simulations and case studies. In addition, part of the course will consist of group and individual presentations. All classes will be held in English and students will be expected to regularly provide written assignments in order to improve their written communication skills.

Literature and Course Materials

- Current internet articles relating to engineering
- Handouts from technical journals and newspapers (New Scientist, New Statesman, INCH etc)
- Case Studies from the Internet (thetimes100)
- Technical English Vocabulary and Grammar by Nick Brieger and Alison Pohl

Assessment

There will be continual assessment throughout the course. Therefore attendance is compulsory. Students who fail to give a presentation/write an assignment and attend class WILL FAIL THE COURSE.

Regular feedback and correction will be provided to encourage improvement in students' written and oral communication skills in English. Here is a detailed breakdown of the grading:

20% group presentation12% individual written task8% class attendance and participation60% exam

Grading Scale:

Students will be graded on a scale of 1 = excellent, 2 = very good, 3 = satisfactory, 4 = pass and 5 = fail.

Schedule English for Engineers

Time: Mondays, 01:45 – 03:15 pm (Group A) and 03:30 – 05:00 pm (Group B)

First Session: Monday, 30th September 2024, 01:45 - 03:15 pm ALL students -

Make sure you attend this class, because important course

informationwill be delivered (only) on this day!

Date	Content	Task / Assignment
30 th September	Introduction to Course: Instructions, expectations, formation of groups, academic writing, energy vocabulary exercise.	Read syllabus & student schedule. Decide on a presentation subject withyour team.
7 th October	Presentation training, introductionto report writing, distribution of presentation topics.	Prepare some report writing exercises, start research into presentation topic.

14 th October	Technical processes and the passive voice.	Classroom task. Please download the "Technical processes and the passive voice" worksheet from Moodle and haveit available for the session.
21 st October	Technical report writing. Individual assignment.	Classroom task.
28 th October	Technical writing I – describing graphs and charts.	Mandatory written task for ALL students. Submission deadline: 10 th November 2024. Please download the "Graph descriptions" worksheet from Moodle.
4 th November	Student Presentations 1 & 2 and discussion round.	All the students should contribute constructively to the ensuing discussion.
11 th November	Technical writing II – describing objects.	Please download the "3D component features" worksheet from Moodle.
18 th November	Student Presentations 3 & 4 and discussion round.	All the students should contribute constructively to the ensuing discussion.
25 th November	Technical writing III – preparation for lab reports.	Classroom group task.
2nd December Student Presentations 5 and discussion round. Smart energy/alternative energy sources.		All the students should contribute constructively to the ensuing discussion.
9 th December	Lab reports.	Classroom group task.
16 th December Meeting energy needs, smart shopping, technical report writing practice.		Classroom group task.
13 th January	Industry 4.0.	Classroom group task.
20 th January	Revision	Revision Tasks

Academic Integrity and Student Responsibility

Students are required to participate actively in all course activities. Furthermore, they will be expected to complete homework/class preparation tasks. Failure to do so may lead to the student being ejected from the class. The group work load should be completed by ALL members of the group.

Students are encouraged to seek assistance from their instructors for their group/individual assignments. Please note that the assignments must be original work based on research conducted. Plagiarism will be heavily penalized.

Code of Conduct for Students

Link to the Code of Conduct for online Teaching

In case of online teaching: Students must ensure that they have a microphone and video camera and a stable internet connection in order to participate on Alfaview.

Teaching Philosophy

My main goal during this course is to help prepare the students to perform in English, as well as they can, in professional and academic situations. With this in mind, I encourage the students to see the classroom as a safe and informal environment where they can experiment with the language and clarify all their doubts. Ideally, each student will end this course more confident, more critical and at the same time more self-aware regarding his/her own communication skills and stance while making presentations or taking part in discussions held in English.

Please feel free to contact us at any time should you have any questions or problems regarding the course or the final examination.

Additional Information

Learning Objectives:

By the end of the course students

- Will be able to write technical reports and lab reports
- Will have gained an insight into a range of technical processes
- Will have extended their range of vocabulary relating to engineering topics
- Will be able to express themselves in a technical discussion in an appropriate manner
- Will be able to write an assignment using appropriate language, register and referencing

Language:

English