



CALL FOR STAFF EXCHANGE under ERASMUS+ 2023-24

Icam - Strasbourg-Europe Campus would like to propose a call for Staff Exchange under the ERASMUS+ program. The following classes are available for this academic year:

| Subject | Domain | Period |
|-------------------------|------------------------|--------------|
| Strength of Materials | Mechanical Engineering | Feb-May 2024 |
| Solid Mechanics | Mechanical Engineering | Feb-May 2024 |
| TOEIC Preparation | Language Department | January 2024 |
| English for Engineers | Mechanical Engineering | May - 2024 |
| German for Engineers | Mechanical Engineering | May 2024 |
| Spanish for Engineers | Mechanical Engineering | May 2024 |
| Supply Chain Management | Industrial Engineering | Feb-May 2024 |
| Metallic Materials | Energy Department | Feb-Jun 2024 |

Some of our teachers can share the class material. The kind of material available is specified below the content area. They could be for Lectures, Tutorials, Lab Sessions, or all material available.





| Strength of Materials – Mechanical Engineering EC6-RDM | | | |
|---|---|-------------|-----------------|
| Duration | 5 to 10 days | Total hours | 13,5 h- Lecture |
| Level | 3 rd Year (BSc) | Language: | English |
| Desired period | From: February 2024 to May 202 | 24 | |
| Course content | Erom: February 2024 to May 2024 Elastic beam theory Fundamental assumptions of beam theory Saint Venant principle Stress-strain diagram of tensile test Geometric properties of cross section: centroïds and area moments of inertia Static equilibrium equations and reactions at joints Internal loads in beams cross sections Diagram of internal loads Simple loadings (tensile-compression, shearing, torsion, pure bending) Combined loadings (tensile-compression, shearing, torsion, pure bending) Combined loadings (simple bending, bending & traction, bending & torsion; deviated bending) Stress and strain: stress vector, stress tensor, strain tensor, normal stress, shear stress, normal strain, shear strain Hooke law of elasticity, plane stress, plan strain Principal stress, principal strain, Mohr circle Failure criteria: Von Mises, Tresca and Rankine Displacement by integration method Principle of superposition for statically indeterminate beams Elastic instability and buckling of columns Euler's buckling load, critical buckling stress Energy methods (strain energy, theorem of fictitious load, Ménabrea theorem) Application of energy methods to statically indeterminate structures Analysis of trusses (static determinacy, axial loads, analysis of trusses by method of joints and by method of sections, strain and displacement in bars) Analysis of arches and curved beams | | |
| Course sharing | \square All \boxtimes Lecture \square Tutorial \square Lab sessions \square None | | |
| Tutor | First name NAME massamaesso.bilasse@icam.fr | | |

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Want to know more?





| Solid Mechanics / Mechanics of Rigid Bodies | | | |
|---|---|-------------|------------------------|
| Duration | 2 to 5 days | Total hours | 8h - Lecture/Tutorials |
| Level | 1 st Year (BSc) | Language: | English |
| Desired period | From: March 2024 to April 2024 | | |
| Course content | [1] Mathematical tools: reference-frame, vectors, kinetic & potential energies (recalls from Mechanics of Particles – seen by students on previous semester) [2] Statics : mechanical actions, mechanical joints, fundamental principle of statics, mechanical equilibrium [3] Kinematics : velocity field, acceleration field, motion composition, planar motion, instantaneous rotation centre, slip-free rolling [4] Kinetics: kinetic moment, inertia moment, inertia operator, inertia matrix, Huygens' theorem, kinetic energy theorem [5] Dynamics: dynamic moment, fundamental principle of dynamics, mechanical energy theorem | | |
| Course sharing | \Box All \boxtimes Lecture \boxtimes Tutorial \Box Lab sessions \Box None | | |
| Tutor | Tutor Sébastien MEY-CLOUTIER <u>sebastien.mey-cloutier@icam.fr</u> | | |
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| TOEIC Preparation – Language Department (EC05-Ang) | | | | |
|--|--|-----------|---------|--|
| Duration | 3 days Total hours 10. h- Lecture / tutorial | | | |
| Level | 5th Year (MSc) | Language: | English | |
| Desired period | d From: May 21st to May 24th 2024 | | | |
| TOEIC preparation classes were designed to reinforce students ability to sit for the official TOEIC test on that same week. The objective is to help the students with classes recalling grammar points as well as the proper techniques for this test. | | | | |
| Course sharing | \Box All \Box Lecture \Box Tutorial \Box Lab sessions \boxtimes None | | | |
| Tutor | Tutor Leandro Di Domenico leandro.didomenico@icam.fr | | | |
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| English for Engineers – Language Department (EC02-Ang) | | | |
|---|--|-------------|----------------------------|
| Duration | 2 to 4 days | Total hours | 10.5 h- Lecture / tutorial |
| Level | 1st Year (BSc) | Language: | English |
| Desired period | From: May 21st to May 24th 2024 | | |
| Course contentThe Technical English class is designed for 1st year engineering students in order to broaden their technical vocabulary in English. The objective is the teaching of mechanical engineering vocabulary equivalent to a Bachelor level. The class could be seen as an introduction to this vocabulary taught by an Engineer. | | | |
| Course sharing | □ All □ Lecture □ Tutorial □ Lab sessions ⊠ None | | |
| Tutor | Tutor Leandro Di Domenico leandro.didomenico@icam.fr | | |
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| German for Engineers – Language Department (EC02-All) | | | |
|--|---|-------------|----------------------------|
| Duration | 2 to 4 days | Total hours | 10.5 h- Lecture / tutorial |
| Level | 1st Year (BSc) | Language | German |
| Desired period | From: May 21st to May 24th 2024 | | |
| Course content | The Technical German class is designed for 1st year engineering students in order to broaden their technical vocabulary in German. The objective is the teaching of Maschinenbau vocabulary equivalent to a Bachelor level. The class could be seen as an introduction to this vocabulary taught by an Engineer. A teacher of German with experience in this field is welcome. | | |
| Course sharing | \Box All \Box Lecture \Box Tutorial \Box Lab sessions \boxtimes None | | |
| Tutor | Tutor Leandro Di Domenico leandro.didomenico@icam.fr | | |
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| Spanish for Engineers – Language Department (EC02-Esp) | | | |
|--|--|-------------|----------------------------|
| Duration | 2 to 4 days | Total hours | 10.5 h- Lecture / tutorial |
| Level | 1st Year (BSc) | Language | Spanish |
| Desired period | From: May 21st to May 24th 2024 | | |
| Course contentThe Technical Spanish class is designed for 1st year engineering students in order to broaden their technical vocabulary in Spanish. The objective is the teaching of vocabulary in Ingeniería Mecánica (nivel Grado) equivalent to a first or second year Bachelor level. The class could be seen as an introduction to this vocabulary taught | | | |
| Course sharing | haring All Lecture Tutorial Lab sessions None | | |
| Tutor | Tutor Leandro Di Domenico leandro.didomenico@icam.fr | | |
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| Duration 2 to 4 days Total hours 6 h - Lecture / tutorial Level 4st Year Language English Desired period From: February to April 2024 English Supply Chain (3hC, 6.5hTP) : - Definition of the Supply chain - Company legistics (financial, communication, financial) - The Bullwhip effect, Efficient Customer Response (ECR) - Value chain (enterprise, company) - Management - Replenishment - Distribution Replenishment - Distribution - Logistics services (1, 2, 3 and 4 PL) - Modeling: Supply Chain Operations Reference-Model (SCOR) - Management methods: Collaborative Planning Forecasting and Replenishment (CPFR), Shared Supply Management (GPA), Vendor Managed Inventory (VMI) - Tools: Warehouse Management System (WMS), Advanced Planning Systems (APS), Transport Management System (TMS), Customer Relationship Management (CRM), Supplier Relationship Management (SRM) Distribution (3hC, 6.5hTP) : - Definition of logistics networks - Smoothing the transport flow - Trade off Cost services - KPI of distribution center - Order Penetration Point (OPP) - Distribution networks (direct, indirect, warehouse, retail distribution - Wrap up - Back up : facilities/ delivery time Course sharing All Lecture Tutorial Lab sessions ⊠ None Tutor Pierre NICOLAY pierre.nicolag@(cam.fr | Supply Chain Management and Distribution IDD Department (Industry and Sustainable Development) (EC08 Supply Chain Management and Distribution) | | | |
|---|---|---|-----------------|-------------------------|
| Level 4st Year Language English Desired period From: February to April 2024 Supply Chain (3hC, 6.5hTP) : Definition of the Supply chain Company logistics (financial, communication, financial) The Bullwhip effect, Efficient Customer Response (ECR) Value chain (enterprise, company) Management Replenishment Distribution Logistics services (1, 2, 3 and 4 PL) Modeling: Supply Chain Operations Reference-Model (SCOR) Management (CPFR), Shared Supply Management (GPA), Vendor Managed Inventory (VMI) Tools: Warehouse Management System (WMS), Advanced Planning Systems (APS), Transport Management System (TMS), Customer Relationship Management (SRM) Distribution (3hC, 6.5hTP) : Definition of logistics networks Smoothing the transport flow Trade off Cost services KPI of distribution center Order Penetration Point (OPP) Distribution networks (direct, indirect, warehouse, retail distribution Wrap up Back up : facilities/ delivery time Course sharing M II Lecture I Tutorial Lab sessions IN None | Duration | 2 to 4 days | Total hours | 6 h- Lecture / tutorial |
| Desired period From: February to April 2024 Supply Chain (3hC, 6.5hTP) : Definition of the Supply chain Company logistics (financial, communication, financial) The Bullwhip effect, Efficient Customer Response (ECR) Value chain (enterprise, company) Management Replenishment Distribution Logistics services (1, 2, 3 and 4 PL) Modeling: Supply Chain Operations Reference-Model (SCOR) Management methods: Collaborative Planning Forecasting and Replenishment (CPFR), Shared Supply Management (GPA), Vendor Managed Inventory (VMI) Tools: Warehouse Management System (WMS), Advanced Planning Systems (APS), Transport Management System (TMS), Customer Relationship Management (CRM), Supplier Relationship Management (SRM) Distribution (3hC, 6.5hTP) : Definition of logistics networks Smoothing the transport flow Trade off Cost services KPI of distribution center Order Penetration Point (OPP) Distribution networks (direct, indirect, warehouse, retail distribution Wrap up Back up : facilities/ delivery time Course sharing All □ Lecture □ Tutorial □ Lab sessions ⊠ None | Level | 4st Year | Language | English |
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| Course sharing ☑ All □ Lecture □ Tutorial □ Lab sessions ☑ None Tutor Pierre NICOLAY pierre.nicolay@icam.fr | Desired period From: February to April 2024 Supply Chain (3hC, 6.5hTP) : - - Definition of the Supply chain - Company logistics (financial, communication, financial) - The Bullwhip effect, Efficient Customer Response (ECR) - Value chain (enterprise, company) - Management - Replenishment - Distribution - Logistics services (1, 2, 3 and 4 PL) - Modeling: Supply Chain Operations Reference-Model (SCOR) - Management methods: - Logistics services (1, 2, 3 and 4 PL) - Modeling: Supply Chain Operations Reference-Model (SCOR) - Management methods: Collaborative Planning Forecasting and Replenishment (CPFR), Shared Supply Management (GPA), Vendor Managed Inventory (VMI) - Tools: Warehouse Management System (WMS), Advanced Planning Systems (APS), Transport Management System (TMS), Customer Relationship Management (SRM) Distribution (3hC, 6.5hTP) : - - Definition of logistics networks - Smoothing the transport flow - Trade off Cost services - KPI of distribution center | | | |
| Tutor Pierre NICOLAY pierre.nicolay@icam.fr | Course sharing | $oxtimes$ All \Box Lecture \Box Tutorial \Box Lab sessions $oxtimes$ None | | |
| | Tutor | Pierre NICOLAY pierre.nicolay@ | <u>licam.fr</u> | |





| Metallic materials – Energy department EC06-Mat | | | | |
|--|---|-----------|--------------|--|
| Duration | 2 to 4 days Total hours 9 h- Lecture | | 9 h- Lecture | |
| Level | 1st Year (BSc) | Language: | English | |
| Desired period | From: February to June 2024 | | | |
| Course content | ad period From: February to June 2024 Developed skills : • Know the different categorizations of materials (periodic classification, bonding categorization, etc.). • Understanding of the physico-chemical phenomena of materials • Know how to select, carry out and analyze a few materials characterization tests (mechanical or physicochemical). • Know how to select, carry out and analyze a few materials characterization tests (mechanical or physicochemical). • Know how to analyze and exploit phase diagrams. • Know the basic techniques for preparing, observing and recognizing structures (IR/UV spectroscopy, X-ray diffractometry, metallography, calorimetry, tensile/compression tests). • Understanding of metal deformation mechanisms (stress-strain diagrams for alloys, etc.) Content: • Material classes from the periodic table, material properties and material applications, • Atomic and molecular bonds, • Crystallography and metals, • Formation and constitution of materials, • Main types of materials: metallic • Physico-chemical characterization of materials • Defects in materials (binary alloys, etc.) • Mechanical properties of materials (metals and alloys) • Illustrated by examples, case studies and applications. | | | |
| Course sharing | □ All ⊠ Lecture □ Tutorial □ Lab sessions □ None | | | |
| Tutor | Your name - gregoire.chabrol@icam.fr | | | |

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Want to know more?