



Programme Handbook

2024/2025

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Developing tomorrow's technology leaders in an ecosystem full of possibilities

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UNITECH's Corporate Partners

Our Corporate Partners are very interested in engaging with UNITECH students to solve the most pressing challenges in our society and shape a better future.

You may engage with the CPs during events or simply by reaching out. These conversations often result not only in an internship, but also in future projects and collaborations that may benefit generations to come.



Acce/eron AIRBUS





































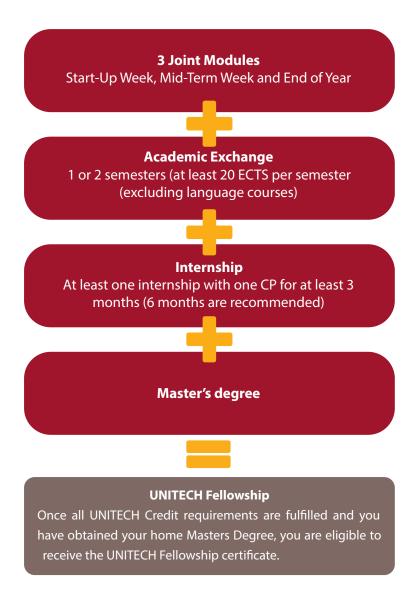
UNITECH Academic Partners

Chalmers University of Technology, Gothenburg, Sweden INSA Lyon, Villeurbanne, France Loughborough University, Loughborough, United Kingdom Universitat Politècnica de Catalunya, Barcelona, Spain Politecnico di Milano, Milan, Italy RWTH Aachen University, Aachen, Germany Trinity College Dublin, Dublin, Ireland

The Structure

Current Master's studies Home University Application / Assessment Center Start-Up Week Exchange with an Academic Partner in the Autumn **Host University** and/or Spring semester / continue Master's studies Mid-Term Week **Corporate Partner** Internship / work (ideally in a different country) End-of-Year **Home University** Complete Master's degree Explore employment opportunities with Graduation Corporate Partners UAA Continue developing the network of professional Alumni possibilities Association 3 coached modules

Requirements to graduate from the UNITECH Programme



^{*}Please ensure you consult with your home university, if it has its own requirements in terms of a) number of credits to be taken on the exchange and b) number of weeks to be on work placement for

THE PROGRAMME

UNITECH Programme is an exclusive Leadership Development Programme for talented Master's students from all STEM disciplines.

Why to apply?

Join the UNITECH Programme and unlock a world of possibilities for your future! By becoming a UNITECH Programme participant, you'll embark on a transformative journey that will shape you into a highly qualified, internationally experienced engineering graduate by providing you with:

- International Experience: Immerse yourself in a global setting through exchange programs and internships, giving you a minimum of one year of invaluable international exposure. This unique opportunity will broaden your horizons and open doors to a world of diverse cultures and professional landscapes.
- Expert Coaching: Each module is meticulously organized and supported by a
 team of experienced coaches drawn from our extensive network. Benefit from
 their guidance and expertise as you navigate through the programme. These
 dedicated professionals are committed to helping you unlock your full potential.
- **Skill Development**: The UNITECH Programme equips you with essential skills in managing a wide range of people, tasks, and professional situations. By navigating through challenging scenarios, you'll emerge with highly developed skills and knowledge that will set you apart from the crowd.
- Extensive Connections: Forge valuable connections through the UNITECH Programme at two distinct levels. Firstly, you'll establish professional connections with our esteemed UNITECH Corporate Partners, providing you with invaluable industry insights and opportunities. Secondly, you'll build personal connections that extend beyond the typical HR-driven contacts, fostering relationships that can truly shape your future.
- Network Expansion: Amplify your professional and personal network by en-

gaging with like-minded individuals from our esteemed UNITECH Academic Partners and the vibrant Alumni Association (UAA). By connecting with these individuals, you'll tap into a diverse community of innovative thinkers, facilitating knowledge sharing and fostering future collaborations.

Mutual Benefits: All these connections are designed to foster mutual growth
and create opportunities for innovation and knowledge sharing. By leveraging
these networks, you'll position yourself for long-term success and propel your
career to new heights.

Joint Modules

To set you on a trajectory towards a fulfilling and prosperous career, in the UNITECH Programme you will attend three unique and specially designed UNITECH modules:



Start-Up Week

You will join fellow students in a dynamic environment for the first time. You will engage in activities and discussions that foster self-discovery and enhance your business skills. You will enjoy the close contact with the network, who brings value through formal events, such as presentations on key themes, and informal opportunities for in-depth discussions on cutting-edge topics. These interactions are the start of your personal connections.



Mid-Term Week

Experience the excitement of tackling real-life business issues during the Mid-Term Week. Our esteemed Corporate Partners provide case assignments that challenge you to deliver tangible results. Many of these solutions are implemented directly within our Corporate Partners' operations or strategies, showcasing the real-world impact of your efforts.



As your UNITECH journey nears its completion and you prepare to enter the professional world, the **End-of-Year** module provides a platform for reconnection. Engage in a mix of formal and informal in-

teractions with the UNITECH network, seamlessly woven into this final module. Showcase your expertise by leading workshops on areas of interest, sharing your knowledge with fellow UNITECH colleagues. Throughout this process, receive valuable coaching to support your growth and development.

Eligibility

The UNITECH Programme is only available to full-time degree-seeking students of the UNITECH Academic Partners. You will find the prerequisites under your home university section.

Please note: Students from non-partner universities cannot participate in the UNITECH Programme.

English

English is the language of the UNITECH Program and therefore all UNITECH students are required to have a proficient knowledge of English (spoken and written).

Application

Each university sets its own application deadline. Please refer to your home university section regarding the application deadline.

You will be asked to fill in the UNITECH online application with:

- Essay questions in English
- Study plans for each of your three target universities (3 separate study plans).
 Please consider the guidelines of each university (which departments are open for UNITECH students, minimum number of courses from each department)
- CV in English (PDF)
- Transcript of records in English (PDF)

For more information and to start your application visit: application.unitech.app/



Selection and Assessment Center

Following the application deadline, students will be selected by their home university to attend an Assessment Center, which is locally organized online by the home universities and the UNITECH Office. Corporate Partners will take part as Assessors in the process of selecting the fitting candidates to form each year 's cohort of UNITECH students. A confirmation of acceptance into the UNITECH Programme will be given at the end of the Assessment Center day.

Allocation to host university

A careful matching of the students to target universities takes place in order to achieve the optimal balance of individual preferences and group dynamics. The result of the allocations will be communicated by the Local Office Coordinators by the beginning of April.

Financial support by UNITECH

Students accepted into the UNITECH Program will receive a 1′000€ grant to cover travel costs related to the Joint Modules.

Our Partners

Our ever-growing list Corporate and Academic Partners can be found here.

Exchange

1 or 2 semesters (at least 20 ECTS per semester (excl. language courses)

You will spend one or two semesters at one of the UNITECH Academic Partner universities, living and studying in a foreign country, where you will extend your studies in engineering.

The Local Coordinator at your home and host university supports you in the administrative procedures and we strongly advise you to check the possible exchange duration with these entities.

Please note: The requirement of gaining a min. of 20 ECTS from the exchange has

to be fulfilled by passing conventional taught courses/modules. Projects, thesis and language courses will not count towards the 20 ECTS. You may find that small research projects are offered by some host universities in their course catalogue, where they are listed as courses, and whose grades and credits will be published on your transcript so that this activity can be transferred back to your home university degree; those projects can be counted towards the 20 ECTS requirements.

Projects, thesis and language courses can be considered for credits beyond the first 20 ECTS and only if these credits are published on official documents (transcript, professors' letters, certificate of attendance etc.).

Internship

At least one internship with one CP for at least 3 months (6 months are recommended)

During the internship in a foreign country with one of our UNITECH Corporate Partner companies, is where you get insights into a specific company in which you may have an employment interest and extend your abilities to perform internationally. Your qualities as a UNITECH student are seen as a valuable addition to a Corporate Partner's talent resources.

Financial support during the internship

During the internship, UNITECH students will be compensated according to the practices of the Corporate Partner which should cover at least the living costs.

UNITECH Alumni Association

After having completed all the required activities and upon obtaining your MSc degree (or an MEng from Loughborough University) from your university and being honored as a UNITECH fellow, you automatically join the UNITECH Alumni Association (UAA).

The UAA serves as a close-knit network, connecting ambitious young engineering professionals who have successfully completed the UNITECH Programme. Its primary objective is to uphold the UNITECH spirit while facilitating effective communication among its members, the UNITECH Office, and our Academic and Corporate Partners. UAA has a rich programme of educational and social events for its members. On the country level, the UAA organizes various events with Local Chapters. They can answer a wide range of questions concerning the programme, as well as organize local get-together events.







Chalmers University of Technology, founded in 1829, is a private institution owned by a foundation located in Gothenburg. The university hosts 13 departments which carry out research and teaching mostly within engineering, science and architecture and it is one of the largest and most highly acclaimed universities of technology in Scandinavia. The total number of students is about 10 000 of which about 30 percent are international students. Chalmers has partnerships with major industries, mostly in the Gothenburg region, and all education is linked to excellent research. Chalmers offers a safe and open-minded study environment with attractive, spacious study areas and computer labs which are accessible at all times. Chalmers has the ambition to use modern pedagogical techniques such as problem-based learning and project-based teamwork under realistic conditions.

Participating Departments

Biology and Biological Engineering

Civil Engineering

Chemistry and Chemical Engineering

Communication and Learning in Science

Computer Science and Engineering

Industrial and Materials Science

Mathematical Sciences

Mechanics and Maritime Sciences

Micro technology and Nanoscience

Physics

Space, Earth and Environment

Technology Management and Economics

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Electrical Engineering

Local Coordinator Jens Hansson jens.hansson@chalmers.se

UAA Local Chapter uaa.lcc.sweden@unitech-international.org

Requirements for Chalmers students

Only students who are currently enrolled in the third year of the five-year engineering programmes are eligible to apply to UNITECH. Students from all engineering fields are welcome to apply.

Information Event **Application deadline Assessment Centre** More information here 1 Dec. 2023 January/February 2024

Requirements for incoming students

BSc of Engineering degree or equivalent at home university must be completed. Thesis work can't be done at Chalmers.

Teaching Language

English at all MSc programmes.

Course Catalogue

You find Chalmers course catalogue here.

You can apply for courses that are open for exchange students. Make sure to select the right study period (sp); fall semester (sp 1 and 2) or spring semester (sp 3 and 4). Note: We cannot guarantee your admittance to all courses you have applied for. Changes can be done until the month before the start of semester. You should select courses from different block schedules to avoid overlap in the schedule.

Useful links

- University website
- Exchange studies and international opportunities
- Academic year and examination period
- Information for Prospective UNITECH exchange students





INSA Lyon is one of France's largest engineering graduate schools and among the top 10 universities of Science and Technology in Europe. Since its creation in 1957, INSA Lyon included both international and human and social aspects in the curriculum of its engineers. In fact, equal importance is given to its international relations and openness as to the quality of its education and research. The international arena has been an essential area for development notably through numerous educational and research partnerships: 200 partner universities, 75% students study abroad, 30% foreign students on the campus and 10 foreign languages taught at INSA Lyon. INSA Lyon is a leader in science education, as well as a pioneer in terms of its policies concerning accessibility and diversity. It graduates over 800 engineers each year in 9 fields of specialization.

Participating Departments

Biosciences (BS)

Civil Engineering (GCU)

Computer Sciences (IF)

Electrical Engineering (GE)

Energy and Environment Engineering (GEN)

Industrial Engineering (GI) Material Sciences (SGM)

Mechanical Engineering (GM)

Mechanical Engineering (GM)

Telecommunication (TC)

Programme Director

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UAA Local Chapter Coordinators

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Requirements for INSA Lyon students

Students of 3rd and 4th year can apply to participate in UNITECH Programme during the 4th or 5th year. Excellent academic and linguistic level is compulsory to apply to UNITECH Programme.

Information Event Application deadline Assessment Centre

12 Oct. 2023 7 Dec. 2023 8 Feb. 2024

Requirements for incoming students

Excellent academic level is compulsory to apply to INSA Lyon.

Teaching Language

According to the chosen study scheme, level B1 is compulsory, B2 is recommended, in French or in English.

Academic Year

First semester: mid-September to end of January

Second semester: February to end of June (Note that the departments: "Industrial Engineering=GI" and "Energy and Environment Engineering=GEN" can't receive students during the spring semester -S2-).

Examination Periods

January and June.

Useful links

- University website
- UNITECH page for INSA
- Registering for Courses taught in English and Regular Courses
- Courses taught in English
- Application/information page





Loughborough University it is one of the UK's leading universities, with a reputation for excellence in teaching and research, strong links with business and industry and unrivalled sporting achievement. Teaching at Loughborough University has consistently been rated excellent in independent assessments, placing the University towards the top of the teaching quality tables. In order to sustain this exceptional quality, the University has developed strong academic, guidance and welfare systems to support students throughout their education. The university was awarded two national centres for excellence in teaching and learning; one in industry and employer linked engineering education, and the other in mathematics and statistics support, the university is internationally known for the innovative work of the two centres. Loughborough University has maintained its top five ranking for a second successive year in The Times and The Sunday Times Good University Guide 2020 and remains the top university in the Midlands.

Participating Departments

Department of Aeronautical and Automotive Engineering

Department of Chemical Engineering

Department of Materials Engineering

School of Mechanical, Electrical and Manufacturing Engineering

Civil Engineering* within the School of Architecture, Building and Civil Engineering

*Note for INCOMING exchange students: The majority of modules on our Integrated Masters Civil Engineering programme are now taught as year-long modules and so unless you are already a postgraduate student you would only have the option of completing a year-long study exchange in that subject area. There is a possibility of taking postgraduate modules, which

remain semester- long but this option is considered carefully by the University on a case-bycase basis.

Note: The School of Business and Economics is NOT a participating School.

Note: Students need to be able to align to one of the above Schools or departments and choose the majority if not all modules from one School or department.

Requirements for Loughborough students

Students must be enrolled on one of the applicable MEng programme pathways. You will need to talk to your UNITECH Programme Director and/or Local Coordinator for eligibility in relation to your programme. Students from all Engineering Schools are welcome to apply.

Information Event	Application deadline	Assessment Centre
Nov 2023	5 Jan 2024	7 Feb. 2024

Requirements for incoming students

Teaching Language

English.

Course Catalogue

- First, please read <u>the guidance notes</u> on coming to Loughborough University to complete your study exchange within the UNITECH programme.
- Exchange students choose modules from the Incoming Exchange Student Module Catalogue.
- You can then view module descriptions through the main <u>Catalogue of Modules</u> website by clicking on the relevant participating department.

Academic Year

The term dates can be found here.

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Useful links

University website





The Politecnico di Milano is one of the best scientific-technological universities in the world according to the prestigious QS World University Rankings, which classified it 1st in Italy and 123rd worldwide. Moreover, it is ranked among the top 20 universities (the QS World University Rankings) in all the three areas of specialization: 13th in Engineering & Technology, 10th in Architecture and 8th in Design. Founded in 1863 it is the oldest of Milan's universities and Italy's largest school of Architecture, Design and Engineering. It offers innovative study programmes and takes part in a great many research and training projects, working jointly with the best European and international universities. Today its avant-garde structures are available to 47,000 students including more than 250 educational and research laboratories. Thanks to a marked internationalisation policy, the majority of Master of Science and doctoral programmes take place wholly in English. This attracts a growing number of high-achieving international students coming from more than 100 different countries. The university's research strategy relates principally to the energy, transport, planning, management, design, mathematics, natural and applied sciences, ICT, built environment, and cultural heritage sectors.

Participating Departments

All BSc and MSc engineering programs offered by the Schools of Engineering (Design & Engineering is a Design program and is not open to UNITECH students).

Programme Director

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UAA Local Chapter Coordinator

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Requirements for Polimi students

Only Engineering student enrolled in their **3rd year** of the Laurea or in their Laurea Magistrale can apply. A balanced non-academic curriculum in addition to academic excellence and a good knowledge of English.

Information Event Application deadline Assessment Centre

23 Nov. 2023, 17:00 10 Jan. 2024 15 Feb. 2024

Requirements for incoming students

Suggested basic knowledge of the Italian language in case the student is interested in classes taught in Italian.

Teaching Language

Italian at the BSc programmes.

Italian and English at the MSc programs (the majority of programmes at the Master level are in English).

Course Catalogue

Bachelor Courses

Master Courses

Academic Year

Autumn Semester: Mid-September 2023 to Mid December 2023. Spring Semester: Last week of February 2024 to the first week of June 2024.

Examination Period

First examination period: mid-January to mid-February 2024. Second examination period: mid-June 2024 to last week of July 2024. Additional examination period: Last week of August to mid-September 2024.

Useful links

- University website
- Information for incoming exchange students

industrial.org

RWTHAACHEN UNIVERSITY



RWTH Aachen was founded in 1870 and has a lengthy history of developments in education and research. Today, with 260 institutes in nine faculties, RWTH Aachen is one of Europe's leading institutions for science and research. RWTH Aachen University employs over 560 professors and 9,600 staff in research, teaching and administration. Currently around 47,000 students are enrolled in over 150 academic programs with 29 percent pursuing degree work in the engineering sciences. About 27 percent are international students coming from 138 different countries. The scientific education that students receive at RWTH Aachen is firmly rooted in real-world application. As a result, graduates are highly sought-after by businesses as trainees for executive positions. RWTH Aachen has achieved outstanding results within the Excellence Initiative established by the German federal and state governments in 2007: it was the consecutive winner twice since its initiation as one out of Germany's top ten academic institutions. In 2019, RWTH Aachen was selected as one of eleven universities of excellence within the framework of the German Excellence Strategy, which is the successor programme to the Excellence Initiative. Also on an international level, RWTH Aachen University enjoys a very good reputation.

Participating Departments

All Engineering fields Computer Science Physics Biotechnology

Requirements for RWTH Aachen students

Students at the end of their bachelor / beginning of their master can be admitted. (A master degree from the home university is required in order to pursue UNITECH graduation).

Information EventApplication deadline
Assessment Centre
26 Oct. 2023
11 Jan. 2024
19 Feb. 2023

Requirements for incoming students

German (& English) Language Proficiency: CEFR (Common European Framework of Reference): B1 level or similar.

Teaching Language

Primary language of instruction is German. Some masters-level coursework is also offered in English.

Course Catalogue can be found here.

Information about Academic Year and Course offering can be found here.

Further information for UNITECH students can be found <u>here</u>.

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UAA Local Chapter Coordinators
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Useful links

- University website
- Exchange and Study Abroad at RWTH
- Study related preparation





Founded in 1592, Trinity College Dublin is the oldest university in Ireland and one of the older universities of Western Europe. Interdisciplinarity is a key in the College strategy in increasing Trinity's international standing as a research-led university. TCD has developed significant international strength in eight research themes: globalization, cancer, genetics, neuroscience, immunology and infection, communications and intelligent systems, nano and materials science, Irish culture and the creative arts. Priority themes within Engineering include, energy, bioengineering, telecommunications, construction, the environment and digital media. The accessibility to all students is also very important. TCD was the first university in Ireland to reserve 15% of first year undergraduate places for students from non-traditional learning groups – students with a disability, socio- economically disadvantaged students as well as mature students.

Participating Departments

Department of Civil, Structural and Environmental Engineering Department of Electronic and Electrical Engineering Department of Mechanical and Manufacturing Engineering Department of Biomedical Engineering

Programme Director Garret O'Donnell +353 1 896 1184 odonnege@tcd.ie **Local Coordinator**Chloe O'Connor
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UAA Local Chapter Coordinators
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Requirements for TCD students

Only students on the MAI track are eligible. Outbound mobility is carried out in Year 4 and applicants must achieve a Year 3 average of 60% (II.1) in the first sitting of examinations to participate.

Information Event	Application deadline	Assessment Centre

October 2023 8 Dec. 2023 19 Jan. 2024

Requirements for Incoming students

UNITECH students are required to have sufficient levels of competency in the English language (B1).

Teaching Language

English.

Course Catalogue

Course Catalogue can be found <u>here</u>. UNITECH students may take any module from the School of Engineering, comprising the following Departments: Department of Civil, Structural and Environmental Engineering Department of Mechanical, Manufacturing and Biomedical Engineering

Department of Electronic and Electrical Engineering.

UNITECH students may take a limited number of modules from other Schools, including the School of Business. For UNITECH students to take Sophister (Year 4) School of Business modules they need to have prior learning of business studies. Please note: Students may choose only the Business School modules listed at the above link (up to 10 ECTS). MSc Business modules are NOT available to visiting students.

Academic Year

Our current academic year structure and academic calendar can be found $\frac{\text{here}}{\text{here}}$. There are 2 x 12 week semesters, each including a study week in week 7.

Examination Period

Examinations take place during assessment weeks at the end of each semester (start and end dates can be found on the calendar).

Useful links

- University website
- School of Engineering



UPC is a public university which was founded in 1971 as a combination of already existing engineering and architecture schools. UPC-BarcelonaTech has now around 30'000 students. The Technical University of Catalonia has an important presence in the county of Barcelona with its Schools and own facilities in the surrounding county of Barcelona, Terrassa, Castelldefels, Manresa, Sant Cugat del Vallès, and Vilanova I la Geltrú. The range of courses at UPC grows and diversifies year by year, to adapt to society's demand. At present, 70 Bachelor Degrees can be studied at UPC in its 20 schools/faculties, and also 73 Official Masters (28 of them taught entirely in English) and 48 doctoral degrees can be obtained. The research carried out at UPC leads the field in many areas and is closely linked to the interests of society, and especially to the production sector. The driving force behind the research consists of 30 departments and some university institutes with a growing number of specific research centres and broadly based centres in collaboration with other institutions.

Participating Departments

UPC is a decentralised university and all academic details about student exchanges are managed by each school/faculty. To learn more about participating UPC schools/faculties please contact the Local Office Coordinator. Specific information for UNITECH candidates is available at the website of the UPC International Relation Bureau.

Programme Director

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UAA Local Chapter Coordinators

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Requirements for UPC students

Students have to be from one of the UPC schools/faculties that participate in the programme). There is no minimum mark as a requirement. Your transcript of records has to generally show your overall performance and motivation. An English certificate confirming your English knowledge is compulsory for the application. See contact details and more information about eligibility and requirements on the UPC website.

Information Event	Application deadline	Assessment Centre
TBD	8 Jan. 2024	30 Jan. 2024

Requirements for incoming students

Although exchange students could follow some subjects taught in English, depending on their host UPC school/ faculty, an intermediate level of Spanish could be requested (a certification of Spanish could be required for admission by the host UPC school/faculty).

More information can be found below:

Incoming UNITECH students
Incoming students at UPC

Teaching Language

Most of the lectures at Bachelor level are in Spanish and/or Catalan. At a Masters' level there is a wide variety of subjects in English.

Course Catalogue

The website of each school/faculty to see the courses offered. Check the information through the website of the <u>UPC International Relations Bureau</u>.

Academic Year and Examination Period

For more information on academic year and examination period, please contact the Local Coordinator.

Useful links

University website

26 <u>national.org</u>

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www.unitech-international.org