INTERNATIONAL INTERNSHIP PORTFOLIO AND ROADMAP

A practical guide for secondary school and university students

1. An opportunity for a future in technology

An international internship is an opportunity to gain experience in a real working environment outside Slovakia. You can work at a company, university or research centre and discover how modern technologies are developed.

For students in technical fields, internships are particularly valuable because the semiconductor industry operates internationally. The development of chips, sensors, electronic devices and new materials brings together specialists from different countries and disciplines. International experience can therefore help you find a job, choose your next course of study or decide on your future career direction. You will also discover which field suits you best, such as electronic design, chip manufacturing, programming, photonics or automation.

Why undertake an international internship?

- Gain practical technical skills.
- Learn to work with modern equipment and technologies.
- Discover how an international company or research centre operates.
- Experience working in an international team.
- Improve your technical English or German.
- Meet people in your field and build professional contacts.
- Develop your independence, communication and problem-solving skills.
- Improve your chances of securing a good job or pursuing further studies.

2. Fields for international internships

The Slovak Chips Competence Centre, SK Chips, is part of a European network of competence centres and organisations dedicated to advancing semiconductor technologies. Students can explore internship opportunities at research centres, companies and universities across Europe and beyond.

Field	What it involves	Relevant fields of study
Nanoelectronics	Developing extremely small electronic components and advanced silicon technologies	Electrical engineering, microelectronics, physics
Low-power chips	Developing low-power chips for sensors, medical devices and the IoT	Electronics, computer science, automation
Packaging and chiplets	Combining multiple chips into a single functional system and protecting electronic components	Mechatronics, materials science, electrical engineering

Photonics	Transmitting and processing information using light	Optics, physics, telecommunications, electronics
Power electronics	Technologies for electric vehicles, energy systems, charging and renewable energy sources	Electrical engineering, power engineering, automation

European education and career opportunities

Notable European organisations include **imec** in Belgium, **CEA-Leti** in France, **the Fraunhofer institutes** in Germany, **Silicon Austria Labs** in Austria and **VTT** in Finland. Each organisation has its own programmes, admission requirements and application deadlines, so it is important to check their official websites or ask your school for information.

Organisation	Country	What it offers students	What to expect and eligibility requirements
imec	Belgium	Research internships and projects for bachelor's, master's and PhD students in nanoelectronics, chips and semiconductor technologies.	Internships are available throughout the year and can last from 3 to 18 months. You must remain enrolled as a student throughout your placement, and a student placement agreement signed by your educational institution is required before the internship begins. You can apply directly to a researcher or for an advertised research topic; there is no fixed application deadline. Website: imec
CEA-Leti	France	Research internships for bachelor's, master's and PhD students in microelectronics, photonics, sensors and advanced technologies.	You will work under a supervisor's guidance and gradually become more independent. These internships are intended for students whose study programmes require a practical placement. Current opportunities are listed on the CEA careers portal: CEA-Leti
Fraunhofer	Germany	Internships, theses, and bachelor's and master's thesis opportunities at numerous research institutes, including in microelectronics, sensors, photonics, power electronics and energy.	Fraunhofer also offers short internships for secondary school students, usually lasting 1 to 2 weeks. University students must be currently enrolled. Applications are submitted directly for a specific position or institute through the online portal; a CV and proof of enrolment are required. Internship opportunities: Fraunhofer
Silicon Austria Labs (SAL)	Austria	Internships and projects in electronics, sensors, power electronics, automation and intelligent systems.	Some positions are also open to students at technical secondary schools whose curricula include a compulsory work placement. If no suitable position is advertised, you can submit a speculative application. You can apply for a specific internship advertised on the SAL careers portal: Silicon Austria Labs careers
VTT	Finland	Summer internships, research internships, bachelor's and master's thesis opportunities, and opportunities in photonics, digital technologies and advanced materials.	VTT hires dozens of students each year. Its Summer of Changemakers programme offers paid internships, usually lasting 3 to 6 months. Applications are submitted for specific positions and typically include a cover letter, CV and transcript of academic records. Website: VTT

How to choose the right organisation

Your area of interest	Recommended organisations
Electrical engineering, microelectronics, physics	imec, CEA-Leti
Chip packaging, testing, system integration	Fraunhofer, Silicon Austria Labs
Photonics, digital technologies, materials engineering	VTT

What to prepare for your application

Most organisations expect:

- A CV.
- A cover letter.
- Proof of enrolment or a transcript of academic records.
- A list of projects, courses and technical skills.
- Where required, a recommendation from a teacher or supervisor.

In your cover letter, explain what interests you about the organisation, which technologies you would like to explore, and how the internship relates to your studies or future career.

Tip: *If no suitable position is currently advertised, many organisations accept speculative applications. Include your educational background, areas of professional interest, availability and the type of internship you are seeking.*

European pilot lines

European pilot lines are state-of-the-art facilities dedicated to developing advanced semiconductor technologies. For students, they do not necessarily offer an immediate route to an internship. The first step often involves specialist webinars, courses, summer schools, workshops or participation in a conference.

These activities help you explore current technologies, gain practical knowledge and build connections with researchers and industry professionals. They can also provide a useful foundation for a school project, a final thesis or a future international internship.

Pilot line	Focus	Opportunities for students	More information
NanoIC – Belgium	Nanoelectronics and advanced silicon technologies	Introductory events, technical courses, hands-on training and opportunities for students from bachelor's to doctoral level.	NanoIC – Talent and Learning Opportunities
FAMES – France	Low-power chips, FD-SOI and integrated circuit design	Specialist courses and design schools, primarily for master's and PhD students with a foundation in microelectronics.	FAMES Academy
APECS – Germany and partner facilities	Advanced packaging, chiplets and chip interconnection for system integration	Specialist events and opportunities to explore university or industry projects in packaging, testing and system integration.	APECS
PIXEurope – Europe	Photonic integrated circuits	Specialist courses, research projects and collaboration in optics, photonics, telecommunications and electronics.	PIXEurope

Recommendation: *Start with an introductory webinar or a short course in a field that interests you. Later, you can progress to a summer school, workshop, project or international internship.*

European Chips Skills Academy

The European Chips Skills Academy (ECSA) gives students the opportunity to explore microelectronics, semiconductors and career opportunities in Europe's technology industry.

ECSA connects universities, research organisations and industry partners that may offer internships, projects or employment opportunities. Internships can last from several weeks to several months and often involve working on real research or development tasks.

Its flagship activity is the **ECS Summer School**, complemented by webinars, courses and opportunities within its partner network.

ECS Summer School

Microelectronics summer school for bachelor's students. The summer school focuses on chips, their design, manufacturing and integration.

Main programme areas

- Semiconductor technologies.
- Integrated circuit (chip) design.
- Digital systems and embedded intelligence.
- Integration into real-world applications.

Eligibility requirements

- Be a student in a STEM field.
- Have completed at least 2 years of a bachelor's degree programme.
- Be enrolled at a university in the EU.
- Have English communication skills at B2 level or above, as all activities take place in English.

Benefits of attending the summer school

- Participation, accommodation and meals are free.
- An opportunity to meet students, researchers and companies from different countries.
- A chance to gain an overview of the field before choosing a master's thesis topic, an internship or further studies.
- Experience that will stand out on your CV or LinkedIn profile.

Up-to-date information about the summer school, courses, webinars and career activities is available on the European Chips Skills Academy website.

European Chips Diversity Alliance

The European Chips Diversity Alliance is a European initiative that promotes greater diversity and inclusion in microelectronics and the semiconductor industry. Its aim is to help students and future professionals from different backgrounds gain better access to education, professional networks and career opportunities in the semiconductor industry.

For students, it primarily offers online learning, specialist events, career discussions and opportunities to become part of a European community. It is not a platform that directly offers internships, but it can help you build contacts, find your way in the field and explore further opportunities.

For more information, visit the European Chips Diversity Alliance website.

3. Who are internships for?

Internship opportunities vary depending on your level of study. Secondary school students usually take part in shorter practical placements abroad, while university students may also undertake longer research placements or internships linked to their final thesis.

Student group	Typical placement duration	Examples of activities
Vocational secondary school students	2–4 weeks	Basic assembly, testing, diagnostics and equipment operation
Bachelor's students	A few days to several weeks	Summer schools, specialist courses, short internships and site visits
Master's students	3–6 months	Professional or research internships, collaboration on a master's thesis
PhD students and early-career researchers	3–12 months	Research placements, working with laboratory equipment and an international team

Internships are particularly relevant to students of electrical engineering, electronics, microelectronics, robotics, mechatronics, automation, photonics, materials engineering and applied physics. An interest in technology, programming, data analysis or industrial design can also be an advantage.

4. What is expected of applicants?

Any motivated student who meets the requirements of the specific programme can apply. Internships are not reserved solely for students with outstanding grades. An interest in the field, readiness to communicate in a foreign language and willingness to learn new things can be equally important in the selection process.

Most host organisations abroad use English. You are advised to have communication skills at approximately B2 level, meaning that you can communicate independently at work, understand instructions and prepare short written documents. German is an advantage, particularly in Germany and Austria, but it is not a requirement for many research internships.

Taking part in school projects, technical competitions, clubs, hackathons or student organisations is a good way to prepare. These experiences can help you when writing your CV and cover letter.

Important: *Requirements may vary between internships. Always check the application deadline, required documents, language requirements, internship duration and funding options.*

5. Internship roadmap

5.1 Preparing during your studies

Preparing for an international internship starts at home. Even in the early years of your studies, it is worth keeping an eye on specialist events, getting involved in projects and building your core technical and language skills.

If you are interested in semiconductors and electronics, you can explore opportunities and activities at objavelektroniku.sk.

It is useful to create a folder containing documents you will need later, including:

- Your CV.
- Proof of enrolment.
- A list of projects, diplomas, certificates or competition results.

5.2 Choosing your field and host organisation

Before applying, **choose the field in which you would like to develop your skills**. If you are interested in circuit design, you can look for organisations specialising in microelectronics. If you are more drawn to light, optics or telecommunications, photonics may be a suitable choice. Those interested in electric mobility and energy can look for internships in power semiconductors.

At this stage, it is worth discussing your choice with a teacher, supervisor, mobility coordinator or SK Chips representative. Their guidance can help you find an internship that matches your field of study, experience level and availability.

Applications most commonly require **a CV and a cover letter**. Use these to explain what you are working on, what you would like to learn and why the host organisation interests you. For **university-level internships**, it may also be useful to include **a transcript of academic records, a recommendation from your supervisor or a sample of your own project work.**

5.3 Application, documents and funding

Once you have been accepted for an internship, you will need to complete the administrative arrangements. If the placement is organised through your university, you will usually be in contact with **your faculty's Erasmus+ coordinator.**

For internships that are to be recognised as part of your studies, **an agreement is often signed between you, your home institution and the host organisation.** This agreement sets out your duties, the placement period, the assessment method and any recognition of academic credits or practical training.

Funding may come from Erasmus+, a scholarship, support from your educational institution or an intermediary organisation, or a contribution from the host company. The amount of financial support depends on the country, the length of the placement, the type of mobility and the rules of the specific programme.

Before departure, prepare your own budget. This should cover travel, accommodation, meals, insurance, local transport and any refundable accommodation deposit. **You may need to pay some costs upfront, even if your grant is paid later.**

5.4 During the internship and after returning home

During your internship, try to take an active role in the team's work. Ask questions to understand the wider context, take notes on what you learn and follow the host organisation's rules, especially safety procedures in laboratories or production facilities.

After returning home, you can draw on your experience when working on your final thesis, pursuing further studies or looking for a job**. An international internship is also a valuable way to build professional contacts. Staying in touch with your supervisor and colleagues may lead to further collaboration, job offers or an opportunity to continue your research.**

6. Where can you undertake an international internship?

Germany

Germany is **one of Europe's main centres for microelectronics.** It offers opportunities in chip manufacturing, electronic systems design, microsystems, sensors, materials and research into new technologies. Well-known organisations **include the Fraunhofer institutes; universities such as TU Dresden, TU Ilmenau and RWTH Aachen;** and semiconductor companies such as **Infineon Technologies, Bosch Semiconductor and GlobalFoundries.**

Austria

Austria has strengths in power electronics, sensors, automation and electronic systems research. Organisations offering interesting opportunities **include Silicon Austria Labs, TU Wien, TU Graz, ams OSRAM and Infineon Austria.**

Belgium

Belgium is particularly well known for research in nanoelectronics and advanced semiconductor technologies. A leading research organisation is **imec.**

Finland

Finland offers opportunities in photonics, quantum technologies, cryogenic electronics and advanced electronic systems. A major research organisation is **VTT Technical Research Centre.**

Taiwan

Taiwan is **a major global centre for semiconductor manufacturing and the development of manufacturing processes.** Students can gain experience in chip manufacturing, electronic systems design, materials research and advanced technological processes.

Prominent Taiwanese institutions include **ITRI, National Taiwan University and National Yang Ming Chiao Tung University**. Internships may be particularly suitable for students of microelectronics, electrical engineering, materials engineering, computer science and industrial automation.

South Korea

South Korea is known for **research into memory chips, displays, advanced materials and electronic systems.** It may be particularly interesting for students looking to explore semiconductor manufacturing, memory technologies, display development and materials research.

Leading research institutions include **KAIST and KIST.** Internships are particularly suitable for students of electrical engineering, microelectronics, computer science, physics, materials engineering and electronic engineering.

Note: *Internships outside Europe may involve more demanding administrative arrangements and higher costs. Before applying, check visa requirements, insurance, accommodation, support from the host organisation and current travel requirements.*

7. Programmes and platforms

Organisation or platform	Brief description	Who it is for
IAESTE Slovakia	International professional internships for students in technical fields	University students
WorkSpace Europe	Erasmus+ placements at companies and research organisations in Europe	University students and recent graduates
ErasmusIntern	A portal listing internship opportunity in Europe	University students
AIESEC	International personal development and professional programmes	Secondary school and university students
Educa International	Organisation of vocational and professional placements abroad for educational institutions	Students at technical and vocational secondary schools, and university students
MyInternship	Internship opportunities at technology companies and organisations	University students
Cultural Vistas	International exchange and professional development programmes	University students and early-career researchers

Example of funding for an international internship

Funding for an international internship may combine an Erasmus+ grant, a contribution from the host organisation, support from your educational institution and your own funds. For Erasmus+ traineeships undertaken by university students, the basic grant rate depends primarily on the destination country. Students undertaking a traineeship also receive an additional €150 per month on top of the basic grant.

The following table provides **an indicative example of monthly support** for a student from Slovakia undertaking a traineeship under the Erasmus+ 2026 call for applications.

Destination country group	Example countries	Indicative Erasmus+ traineeship grant
Countries with higher living costs	Germany, Austria, Belgium, Finland, France, the Netherlands, Ireland, Sweden	€824 per month
Countries with medium living costs	Czechia, Greece, Portugal, Spain, Slovenia, Cyprus, Malta	€756 per month
Countries with lower living costs	Poland, Hungary, Romania, Croatia, Türkiye, Serbia, Bulgaria	€700 per month

These amounts already include the €150 monthly top-up for students undertaking traineeships. **The current traineeship rates for Slovak universities under the 2026 call range from €700 to €824 per month, depending on the destination country group.**

Illustrative example: an internship in Germany

A university student undertakes **a three-month traineeship** in Germany through Erasmus+.

Item	Indicative amount
Erasmus+ traineeship grant	€824 per month
Total standard grant	€2,472 for 3 months
Possible contribution from the host organisation	Varies depending on the company or host organisation
Travel contribution	Depends on the distance and chosen means of transport
Costs covered by the student	Depend mainly on accommodation, meals, transport and insurance costs

For a placement in Germany, the grant may cover a substantial proportion of the costs, but it will not necessarily cover all expenses. Accommodation and the refundable accommodation deposit are often the largest expenses, and the deposit usually needs to be paid before the full grant has been received.

Additional support

Students with fewer opportunities may be eligible for an additional contribution. For long-term Erasmus+ mobility, this may amount to **an extra €250 per month**; however, the exact eligibility requirements are determined by the educational institution or mobility consortium in accordance with the applicable programme rules.

An additional travel contribution may also be available for green travel, such as travelling by train, bus or carpooling. The amount depends on the distance and the rules of the current call.

Important: *An Erasmus+ grant is a contribution towards internship-related costs, not a guarantee that all expenses will be covered. Before departure, always prepare a budget, check when the grant will be paid and find out whether the host organisation offers a salary, scholarship, accommodation or other financial support.*

Before applying, check each organisation's website for current opportunities, requirements and deadlines, and confirm whether the programme is available to students from Slovakia.

8. FAQ (Frequently asked questions)

Will I have to pay for the internship myself?

Not always. Many internships are supported by a grant, scholarship or contribution from the host organisation. However, the amount of support varies depending on the programme and country. You should therefore not assume that all costs will be covered in full.

Before departure, always prepare a budget and check when the funding will be paid. In some cases, you may need your own money for the first few weeks of your stay, for example to cover an accommodation deposit or travel expenses.

Will my educational institution recognise my international internship?

Many educational institutions can recognise an internship as practical training, a separate course or part of a final thesis. The key is to arrange this recognition before departure. Contact your academic affairs office, mobility coordinator or supervisor.

Do I need excellent grades?

A strong academic record can be an advantage, but it is not the only selection criterion. Organisations often also consider your motivation, language skills, interest in technology and personal projects.

How can SK Chips help you?

Depending on the programme, SK Chips may be able to help with:

- Choosing a suitable field.
- Finding a host organisation.
- Preparing documents.
- Understanding funding options.
- Contacting researchers and companies.
- Planning your next steps in your professional development.

9. Contacts

For information about international internship opportunities and support in choosing a programme, you can use the following contact details:

Contact	Details
Email	vanda.hudakova@skchips.sk
Phone	+421 951 319 975
Website	objavelektroniku.sk / skchipscompetencecentre.sk
Address	Slovak Chips Competence Centre, Ilkovičova 3, 841 04 Bratislava, Slovakia

Note on keeping information up to date

Internship and grant requirements, application deadlines and opportunities offered by individual organisations may change. Before publishing this information or applying, verify all current details on the official websites of the relevant programmes and organisations.