

ARCADA UNIVERSITY OF APPLIED SCIENCES



Info Session – Third Year Studies

MSE24 & MTH24

Sofie Sundström & Laurits Møller

6.5.2026

Topics Today

- Academic Year 26-27
- The First-, Second- & Third-Year Studies
- Development Studies
- Registration for the Academic Year
- Course Enrollment
- Practical Training
- Exchange Studies
- Who to Contact?
- Tuition Fees & Scholarship

Academic Year 2026-2027

- **Periodization:**

Period 1: 1.8–25.10.2026

Period 2: 26.10–31.12.2026

Period 3: 1.1–21.3.2027

Period 4: 22.3–31.7.2027

- **Tuition starts:** 31 August 2026

- **No tuition (winter break):** 19
December 2026 – 6 January 2027.

- **Course registration:**

Period 1: 10.8-30.8.2026

Period 2: 10.8-25.10.2026

Period 3: 1.12.2026-6.1.2027

Period 4: 1.12.2026-21.3.2027

- **NOTE!** Changes to these dates might occur. Check updated info in **Sisu**

- More information on **Start**

MSE24

1st & 2nd Year

Courses; In Total 120cr

- 115cr Mandatory courses
- 5cr Development studies
- Double check the exact courses from the updated PDF file found at the bottom of this page on [Start](#)

MECHANICAL AND SUSTAINABLE ENGINEERING			Kod		240							
General education studies (15 sp)			Year 1				Year 2					
Education in a Digital and Sustainable Nordic Society (15 sp)												
Technology and Learning	GT-1-013	5										
Teamwork and Innovation	GT-1-014		5									
Ethical and Sustainable Societal Development	GT-1-015			5								
Professional studies (165 sp)			Year 1				Year 2					
Basic studies in Technology (30 sp)												
Linear Algebra	PM-2-026		5									
Differential calculus	PM-2-025					5						
Integral calculus	PM-2-024						5					
Engineering Chemistry	GT-2-013	5										
Engineering Physics	GT-2-014				5							
Introduction to programming and automation	GT-2-024	2.5	2.5									
Sustainable Modelling (15 sp)												
Environment and Resources	GT-2-015				5							
Sustainable Energy and Materials	GT-2-019					5						
Life Cycle Assessment	GT-2-020										5	
Technical Modelling (15 sp)												
Technical Drawing	PM-2-030		5									
Computer Aided Design	PM-2-031			5								
Programming	GT-2-021										5	
Materials (30 sp)												
Materials Chemistry	PM-2-032									5		
Manufacturing and Processing	PM-2-034								2.5	2.5		
Material properties	PM-2-033										5	
Composites	PM-2-035											
Heat Transfer	PM-1-006											
Material Selection	PM-2-041											
Engineering Design (30 sp)												
Statics	PM-2-036							5				
Mechanics of Materials	IM-2-042								5			
Digital Manufacturing	PM-2-038											
Finite Element Method	PM-2-003											
Dynamics	PM-2-037											
Computer Aided Engineering	PM-2-039											
Professional Kommunikation (15 sp)												
English Professional Communication MSE	SP-2-028			2.5	2.5							
Swedish for Beginners 1	SP-1-004					5						
Swedish for Beginners 2	SP-1-044							5				

MTH24

1:a & 2:a årets kurser; Totalt 120 sp

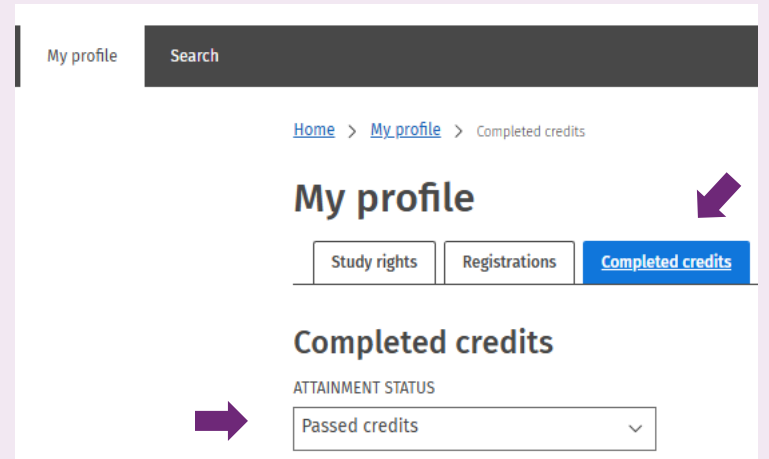
- 115 sp obligatoriska kurser
- 5 sp utvecklingsstudier
- Dubbelkolla kurserna med den uppdaterade PDF-filen som finns längst ner på denna sida på [Start](#)

MATERIALTEKNIK OCH HÅLLBARHET 2023-2024			Kod	240									
Allmänbildande studier (15 sp)				År 1				År 2					
Bildning i ett digitalt och hållbart nordiskt samhälle (15 sp)													
	Teknologi och lärande	GT-1-010	5										
	Teamarbete och innovation	GT-1-011		5									
	Etisk och hållbar samhällsutveckling	GT-1-012			5								
Professionsspecifika studier (165 sp)				År 1				År 2					
Basstudier i teknik (30 sp)													
	Linjär algebra	EM-1-003		5									
	Differentialkalkyl	EM-1-004					5						
	Integralkalkyl	EM-1-005						5					
	Teknisk kemi	GT-2-013	5										
	Introduktion till programmering och automation	GT-2-024	2,5	2,5									
	Teknisk fysik	GT-2-014				5							
Hållbar modellering (15 sp)													
	Miljö och resurser	GT-2-015				5							
	Hållbar energi och material	GT-2-019					5						
	Livscykelanalys	GT-2-020										5	
Teknisk modellering (15 sp)													
	Teknisk ritning	PM-2-030		5									
	Computer Aided Design	PM-2-031			5								
	Programmering	GT-2-021											5
Materialteknik (30 sp)													
	Materialkemi	PM-2-032										5	
	Tillverkning och processer	PM-2-034									2,5	2,5	
	Materialegenskaper	PM-2-033											5
	Kompositer	PM-2-035											
	Värmeöverföring	PM-1-006											
	Materialval	PM-2-041											
Design (30 sp)													
	Statik	PM-2-036								5			
	Materialmekanik	IM-2-042									5		
	Digital tillverkning	PM-2-038											
	Finita elementanalys	PM-2-003											
	Dynamik	PM-2-037											
	Computer Aided Engineering	PM-2-039											
Professionell kommunikation (15 sp)													
	English Professional Communication EEE	SP-2-026			2,5	2,5							
	Svenska och kommunikation för ingenjörer	SP-2-024			2,5	2,5							
	Tekniikan suomi	SP-2-027						5					



IMPORTANT that all credits that belong to your degree also can be found in your Study plan! (Structure of studies)

You can see your completed credits from My profile -> Passed credits



Home > Structure of studies

My study plan 2024 PRIMARY PLAN

Mechanical and Sustainable Engineering		EDU-324000		Selections done	
4.55	Selections done	240-260	240 105		
4.5	Parts completed	15	15 15		
	Parts completed	15 15			
5 CR Pass	GT-1-013	5 CR 4	GT-1-014	5 sp	GT-1-015
Technology and Learning		Teamwork and Innovation		Ethical and Sustainable Societal Dev	

3rd Year Studies, 60cr

Mandatory courses; 40cr

- Heat Transfer P1
- Digital Manufacturing P1
- Composites P1-P2
- Dynamics P2

- Writing for Research P3
- Computer Aided Engineering P3-P4
- Material Selection P4
- Finite Element Method P4

• Development studies; 20cr

- Circular Economy
- Plastic Technology
- Advanced Materials Technology
- Project
- Finnish for beginners
- Other?

- **Practical Training during summer?**

Development studies 30cr

Optional courses

In what area do you want to deepen your knowledge?

Examples in your study plan:

Circular economy (15sp)

Plastic Technology (15cr)

Advance Materials Technology (15cr)

Project (5-15cr)

Finnish for beginners (15cr) [MSE]

Becoming an entrepreneur pre-incubator program (15cr)

More alternatives later in the presentation...

NOTE: You need to change to version 2025-2029 before you can enroll to these courses next year!

Circular Economy, 15cr

Paula Linderbäck

- *2nd year*
- Circular Economy Principles, P2
- Circular Economy Sectors, P3
- Circular Economy Indicator, P4

You will develop:

- A foundational understanding of circularity in sustainability across technical and biological spheres.
- Familiarity with material and energy circularity and current industry developments.
- Skills in systems thinking to identify closed loops, zero-waste solutions, and socio-economic links like the sharing economy.
- The ability to evaluate evidence and propose regenerative or restorative process couplings.
- Insight into the future role of engineers in circular economy.
- Competence in using LCA tools to assess product, process or company performance.
- The ability to distinguish design intent from actual performance and suggest corrective actions for circular transitions.

Plastic Technology, 15cr

Silas Gebrehiwot

- *3rd year + 4th year*
- Fluid Mechanics, P2 (3rd year)
- Mould Design, P3 (3rd year)
- Processing Methods and Optimization, P1 (4th year)

You will:

- Understand basic fluid properties (e.g., density, viscosity) and analyze flow parameters and pressure drops in pipe systems.
- Use FEM in COMSOL to model laminar fluid flow.
- Grasp injection moulding principles, machine components, and two-plate mould design.
- Design moulds, simulate melt flow, prototype, and optimize injection moulding parameters.
- Understand polymer processing technologies and the impact of processing parameters.
- Use computational tools to model, analyze, and optimize processes through design of experiments (DOE).
- Appreciate the value of experimental design in improving process efficiency.

Advanced Materials Technology, 15 cr

Silas Gebrehiwot, Stewart Makkonen-Craig, Rizwan Ullah

- *3rd year*
- Viscoelasticity, P2
- Material analysis, P2
- Sustainable Product Design, **P3**
(earlier in P1)

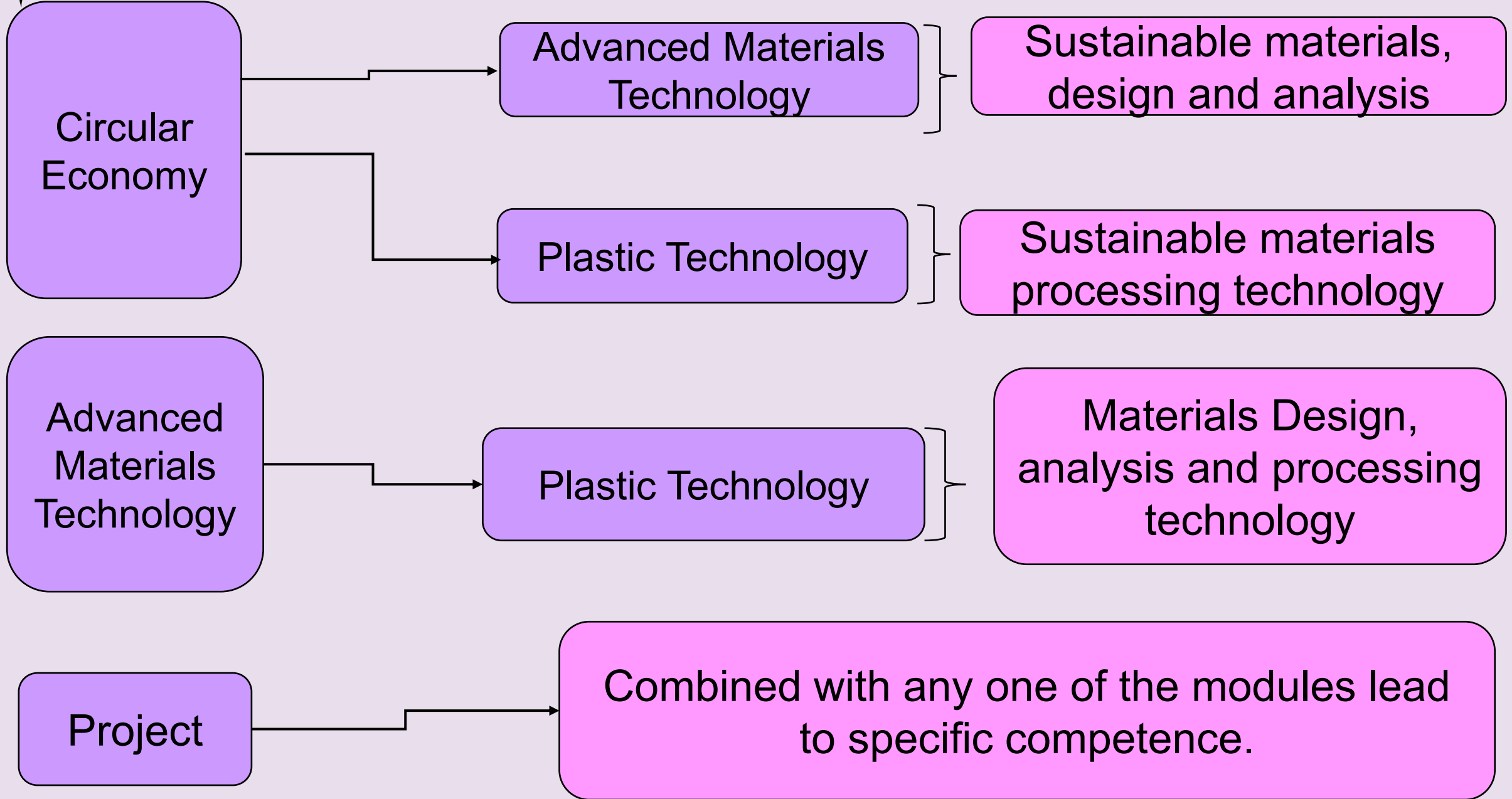
You will:

- Identify and evaluate sustainable materials and manufacturing processes.
- Apply principles of sustainable product development to engineering design.
- Design efficient, low-waste, resource-conserving products.
- Understand short- and long-term properties of polymers and the effects of temperature.
- Analyze material deformation and mechanical responses using computational models.
- Understand and apply modern material analysis methods.
- Select appropriate analytical techniques for solving engineering material problems.
- Plan, conduct, and interpret material analysis experiments for failure analysis.

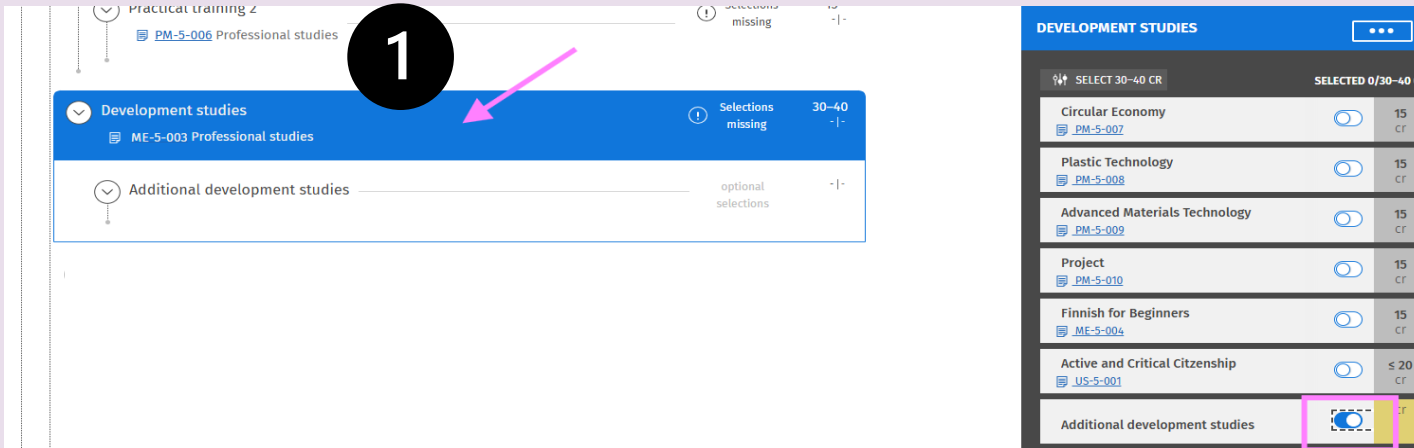
Project, 5-15cr

Silas Gebrehiwot

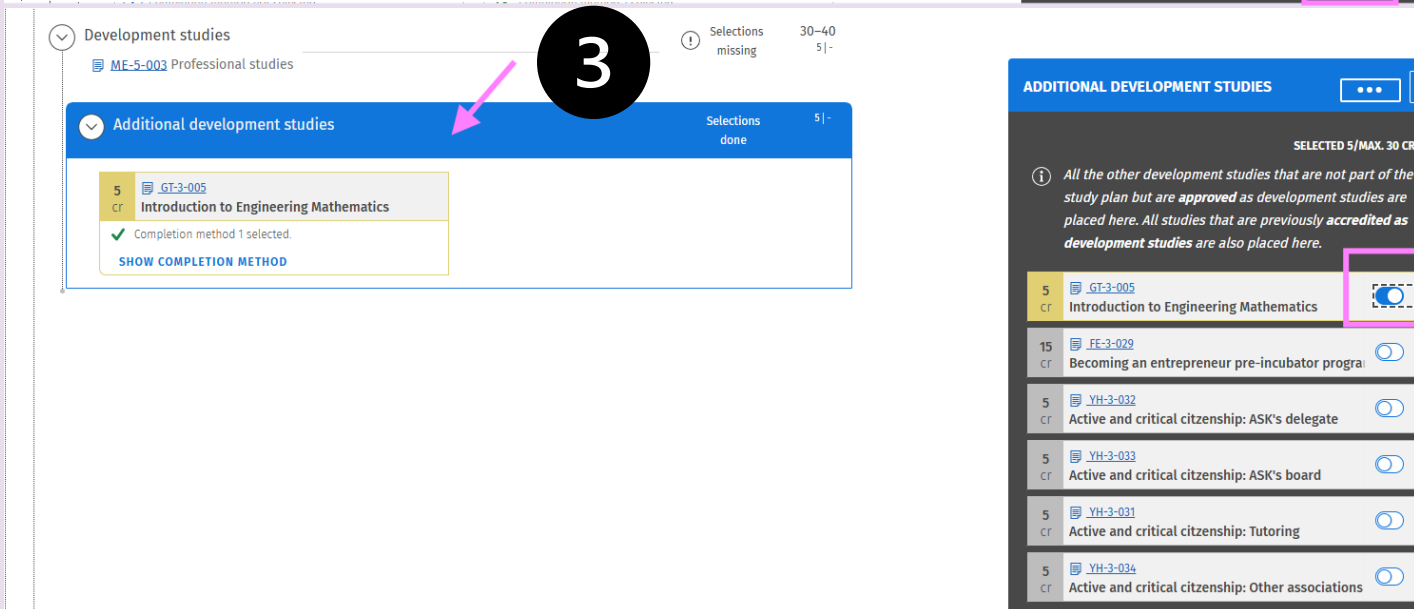
- Theoretical and practical skills learned during the project are to be planned individually for each student.
- Project is planned, executed and reported according to individual study plan or according to the teacher's instructions
- P1-P4



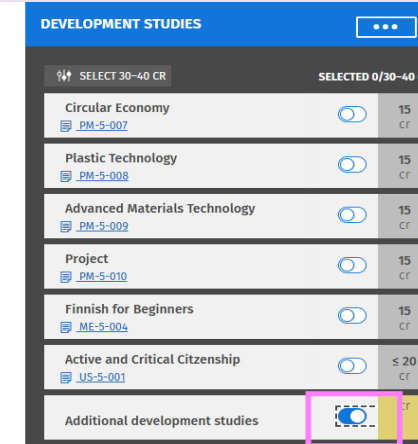
How to view the development study courses in your study plan for MSE / MTH



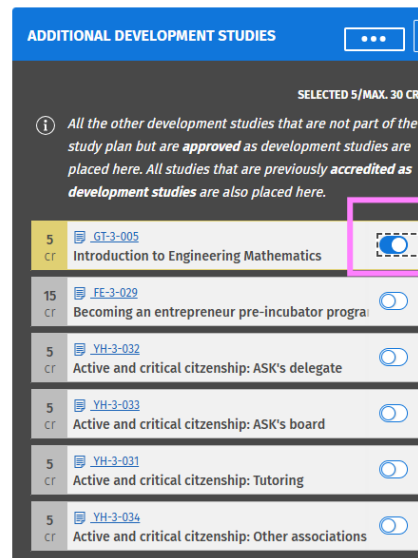
1. Click on the thin blue line beside "Development studies"



2. From the box that opens up to the right, you can then pick what module(s) you want to choose



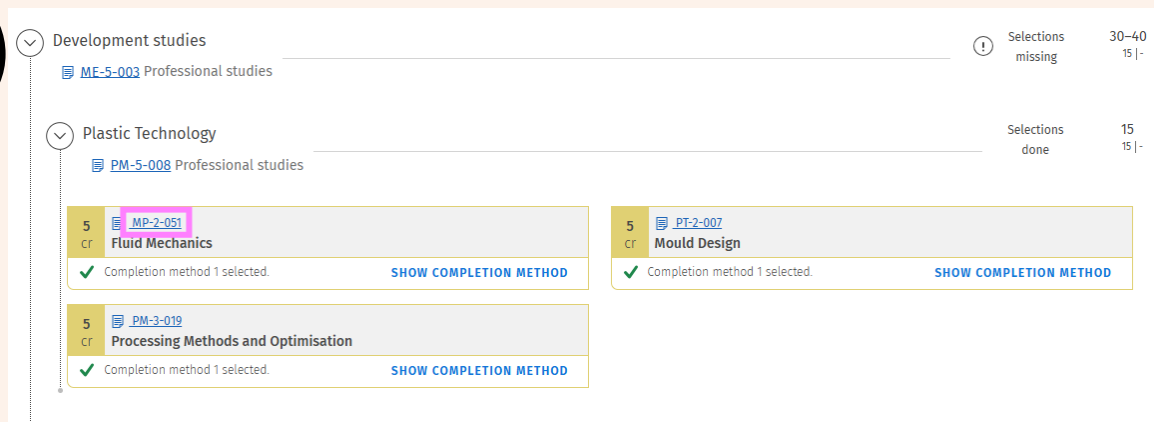
3. Then click on the thin blue line beside your chosen module



4. Choose the courses you want to take from the box to the right

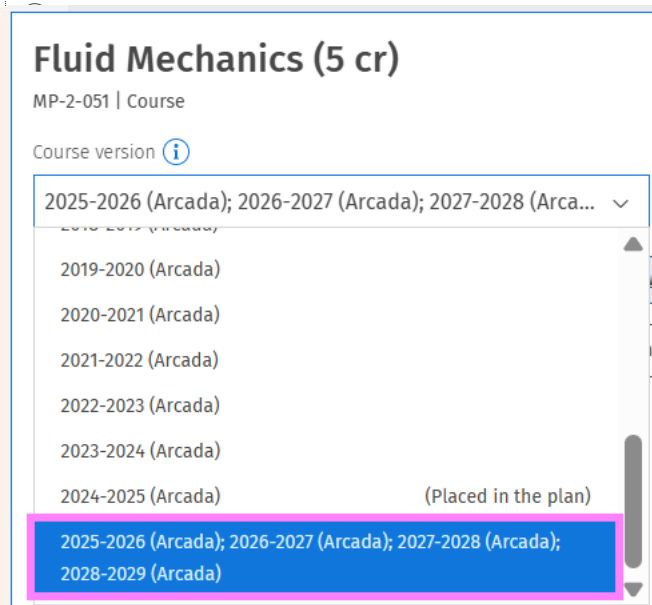
How to change the version of courses

1




The screenshot shows a course structure interface. Under 'Development studies', there is a course 'ME-5-003 Professional studies' with 'Selections missing' and '30-40' credits. Under 'Plastic Technology', there is a course 'PM-5-008 Professional studies' with 'Selections done' and '15' credits. Below these are three course cards: 'MP-2-051 Fluid Mechanics' (5 cr), 'PT-2-007 Mould Design' (5 cr), and 'PM-3-019 Processing Methods and Optimisation' (5 cr). Each card has a green checkmark and the text 'Completion method 1 selected.' and a 'SHOW COMPLETION METHOD' link.

2



The screenshot shows the 'Fluid Mechanics (5 cr)' course page. The course code is 'MP-2-051 | Course'. Under 'Course version', there is a dropdown menu with the following options: '2019-2020 (Arcada)', '2020-2021 (Arcada)', '2021-2022 (Arcada)', '2022-2023 (Arcada)', '2023-2024 (Arcada)', '2024-2025 (Arcada) (Placed in the plan)', and '2025-2026 (Arcada); 2026-2027 (Arcada); 2027-2028 (Arcada); 2028-2029 (Arcada)'. The last option is highlighted in blue.

3

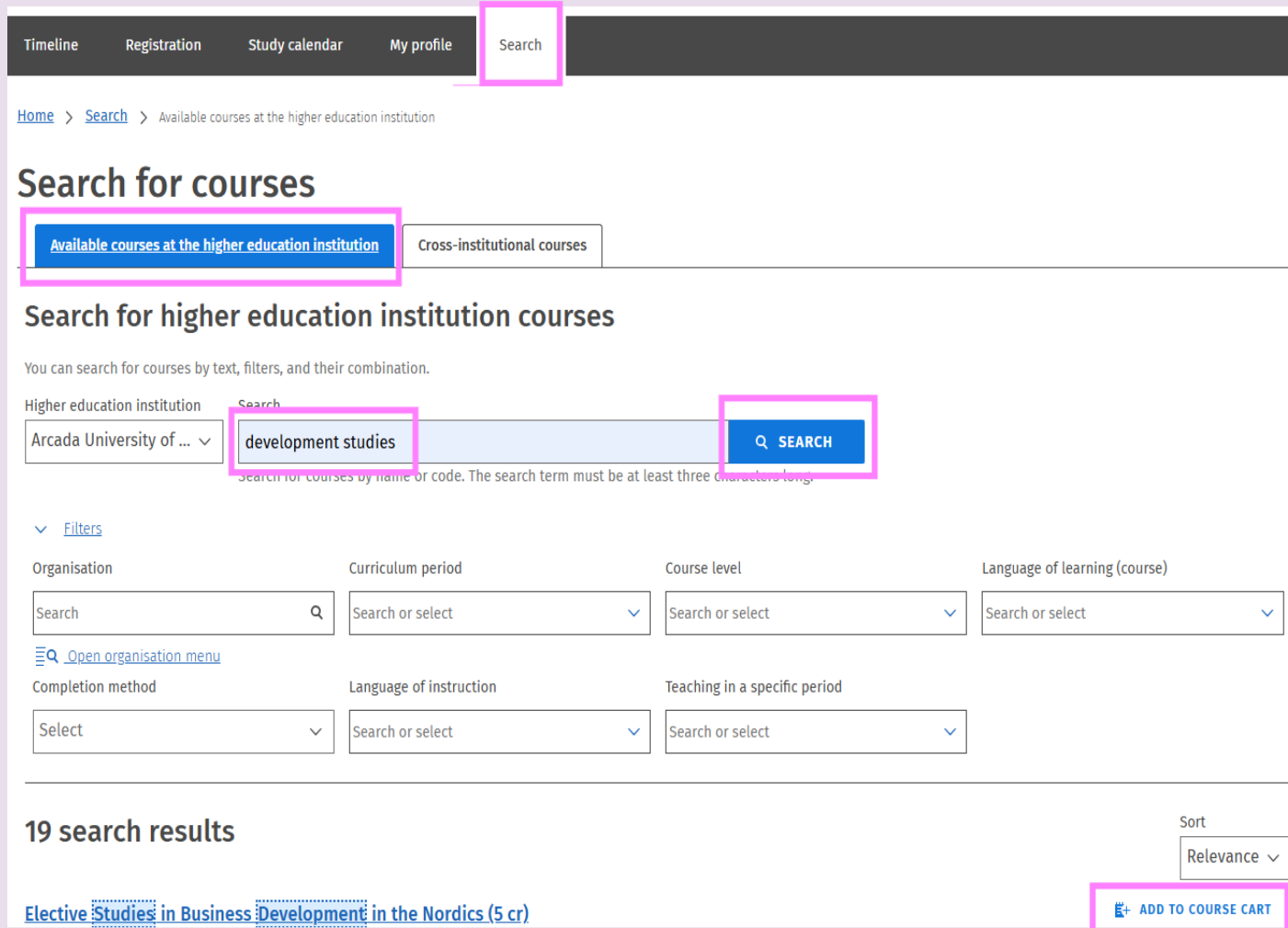
 You are viewing a version of the course that is not in your plan. [Switch to this version](#)

1. Go to "Structure of studies" and click on the course code for the course
2. Choose version 2025-2029
3. Click on "Switch to this version" in the blue info box
4. You will now be able to register to the course as usual during the next academic year

Additional Development Study Courses @ Arcada

Search in Sisu

Check with Rizwan if the course could be a good fit for your study plan.



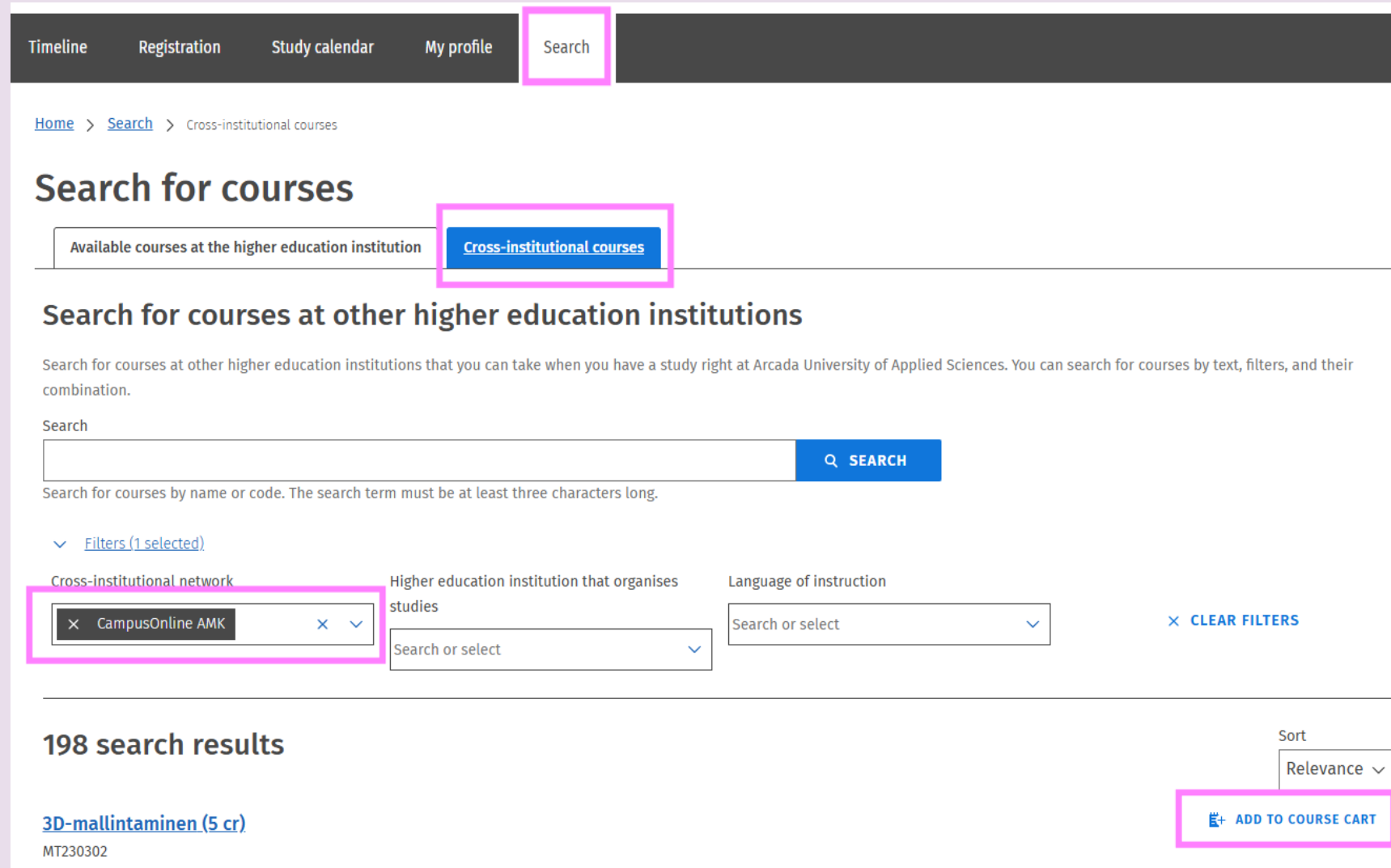
The screenshot shows the Sisu search interface. At the top, there is a navigation bar with links for 'Timeline', 'Registration', 'Study calendar', 'My profile', and 'Search'. Below this, a breadcrumb trail reads 'Home > Search > Available courses at the higher education institution'. The main heading is 'Search for courses', followed by two tabs: 'Available courses at the higher education institution' (which is selected) and 'Cross-institutional courses'. Below the tabs, the section is titled 'Search for higher education institution courses'. A sub-heading states: 'You can search for courses by text, filters, and their combination.' The search form includes a dropdown for 'Higher education institution' (set to 'Arcada University of ...'), a search input field containing 'development studies', and a 'SEARCH' button. Below the search form, there are several filter sections: 'Filters' (expanded), 'Organisation' (with a search field and 'Open organisation menu' link), 'Curriculum period', 'Course level', 'Language of learning (course)', 'Completion method', 'Language of instruction', and 'Teaching in a specific period'. At the bottom, it shows '19 search results' and a 'Sort' dropdown set to 'Relevance'. A specific result is visible: 'Elective Studies in Business Development in the Nordics (5 cr)', with an 'ADD TO COURSE CART' button next to it.

Campus Online in Sisu

More info and guidelines on Start:

- [Video](#)
- [Step by step; text](#)

Check with Rizwan if the course could be a good fit for your study plan.

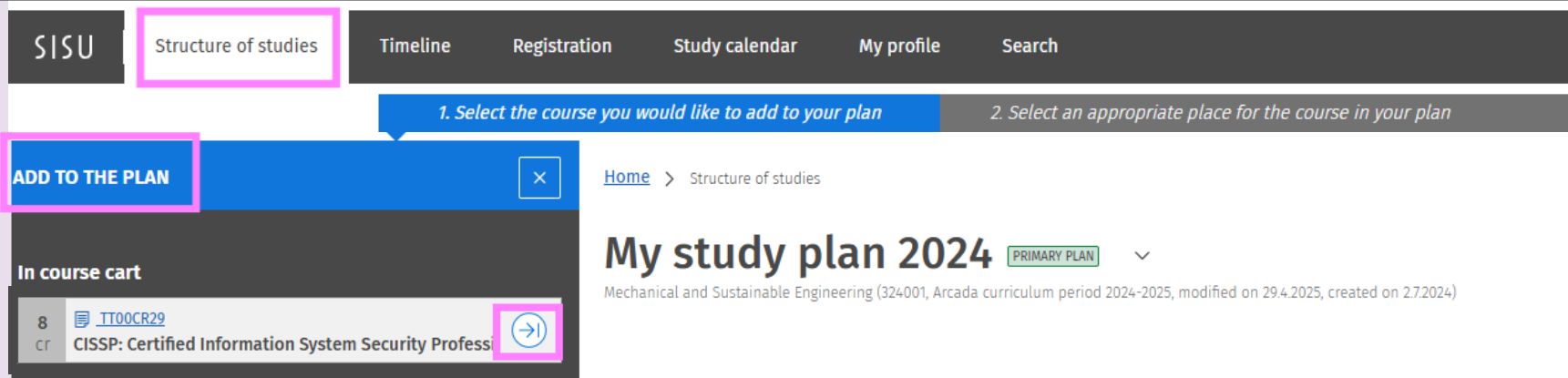


The screenshot shows the Sisu search interface. At the top, there is a navigation bar with links for Timeline, Registration, Study calendar, My profile, and Search. The Search link is highlighted with a pink box. Below the navigation bar, there is a breadcrumb trail: Home > Search > Cross-institutional courses. The main heading is "Search for courses". Below this, there are two tabs: "Available courses at the higher education institution" and "Cross-institutional courses", with the latter highlighted by a pink box. The section is titled "Search for courses at other higher education institutions". Below this, there is a search input field and a "SEARCH" button. A note states: "Search for courses by name or code. The search term must be at least three characters long." Below the search field, there is a filter section titled "Filters (1 selected)". The selected filter is "Cross-institutional network", which is highlighted by a pink box and contains the text "CampusOnline AMK". Other filters include "Higher education institution that organises studies" and "Language of instruction". A "CLEAR FILTERS" button is visible. At the bottom, it shows "198 search results" and a "Sort" dropdown menu set to "Relevance". A pink box highlights the "ADD TO COURSE CART" button next to the first result, "3D-mallintaminen (5 cr) MT230302".

Add Course to Your Study Plan

from Arcadas general selection or Campus online

If you have added a course to the cart; Go to "Structure of studies" -> click on "Add to the plan" which is found to the left -> click on the arrow next to the course you want to add



SISU Structure of studies Timeline Registration Study calendar My profile Search

1. Select the course you would like to add to your plan 2. Select an appropriate place for the course in your plan

ADD TO THE PLAN

In course cart

8 cr TT00CR29
CISSP: Certified Information System Security Profess →

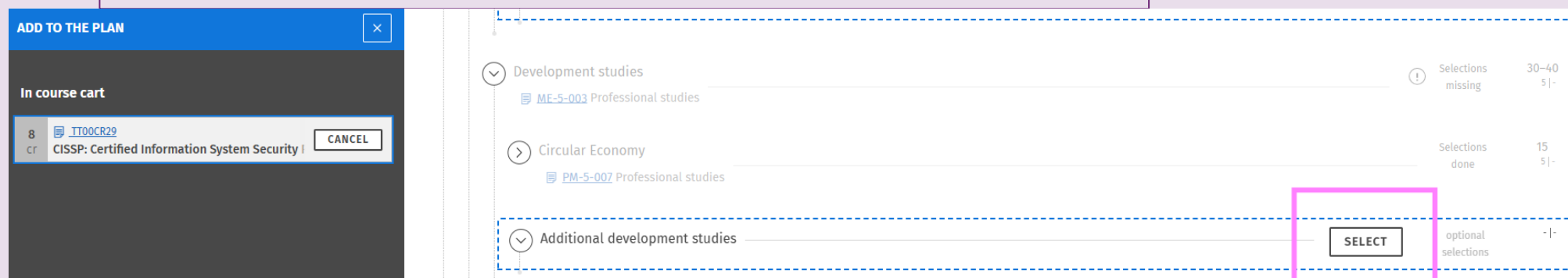
Home > Structure of studies

My study plan 2024

PRIMARY PLAN

Mechanical and Sustainable Engineering (324001, Arcada curriculum period 2024-2025, modified on 29.4.2025, created on 2.7.2024)

Scroll down until you come to Development studies – **Additional Development studies** and click on **Select**



ADD TO THE PLAN

In course cart

8 cr TT00CR29
CISSP: Certified Information System Security I CANCEL

Development studies 30-40
ME-5-003 Professional studies Selections missing 51-

Circular Economy 15
PM-5-007 Professional studies Selections done 51-

Additional development studies optional selections -1-

SELECT

Registration for the Academic Year

- **Remember to register for the academic year!** (present / absent)
 - 15.4–10.9
 - Finnish legislation requires a mandatory registration for each academic year for all students, or they will lose their right to study.
 - Needs to be done before you register to courses in August!
 - Questions? Contact Study Affairs
- **Course registration for Period 1**
 - 10.8-30.8
 - Instructions for course registration can be found on Start: [Through the study plan](#) / [Through the timeline](#)
- **As a student at UAS you are responsible for your own studies and for registering to your courses before the deadline!**

Practical Training, 15cr + 15cr

- **Can include:**
 - Engineering tasks
 - Sustainability-related work
 - Managerial or economic work in engineering contexts
- **Practical training 1 - Introductory Work Experience (15cr)**
 - Will give a basic orientation into working life.
 - Good if the internship is at a company that is relevant for the field (even if tasks e.g. in customer service), but this is not necessary if done in Finland
 - If completed abroad, it needs to be related to engineering
- **Practical Training 2 - Professional Work Practice (15cr)**
 - Must always include profession-specific tasks; **work related to your MSE/MTH studies.**
 - E.g. Engineering work in any industry and Sustainability-focused roles

Practical Training 15cr + 15cr

Where?

- In Finland
- Abroad

When?

- During the 4th year (in the study plan)
- Often during summer after 2nd / 3rd year

How long?

- Full-time work; 10 weeks
- Part time work; 400h

- ❖ **You are responsible for finding your own internship position!**
- ❖ **Contact Rizwan if you are unsure what can be approved as practical training.**
- ❖ **Check more details at [Start](#)**

Practical Training 15cr + 15cr

- **Enroll to Practical training 1 & 2 in SISU**
 - access to documents and instructions in itsLearning
- If you are paid for your work during your internship;
 - you are in a regular employment relationship
 - a formal practical training contract is not needed
- If you do not have a salary during your internship;
 - you should have a **practical training contract** (itsLearning) signed by the employer, you and your degree program director, before you start the internship.
- After the practical part is completed;
 - **hand in a report & work certificate**

How to Find an Internship Position?

- [Arcada Job Portal](#) (online career services for students)
 - Create a profile, upload your CV, find jobs, take part in (online) events, follow companies, get updates to your email and more.
- [Career center Arabia](#)
 - Career counselling; help with searching for a job, applying for jobs, CV, LinkedIn & preparations before job interviews.
 - Workshops & events.
- [Työmarkkinatori](#) (Swe/Fi)
- [Insinööriiton Työpaikkatori](#) (Fi)
- [Duunitori – kesätyöt](#) (Fi)
- [Finland Jobs](#)
- [Laura](#)
- [Hello Talent](#)
- [STRYV](#)



Read
Arcada
mail!



Be active!



Participate
in events!

Networking & Other Events

At Arcada:

- My Future work
 - Recruiting and networking event in January!
- KC Arabia
 - CV clinics
 - LinkedIn workshops
 - Summer job workshops
 - Photos for CV

Outside of Arcada:

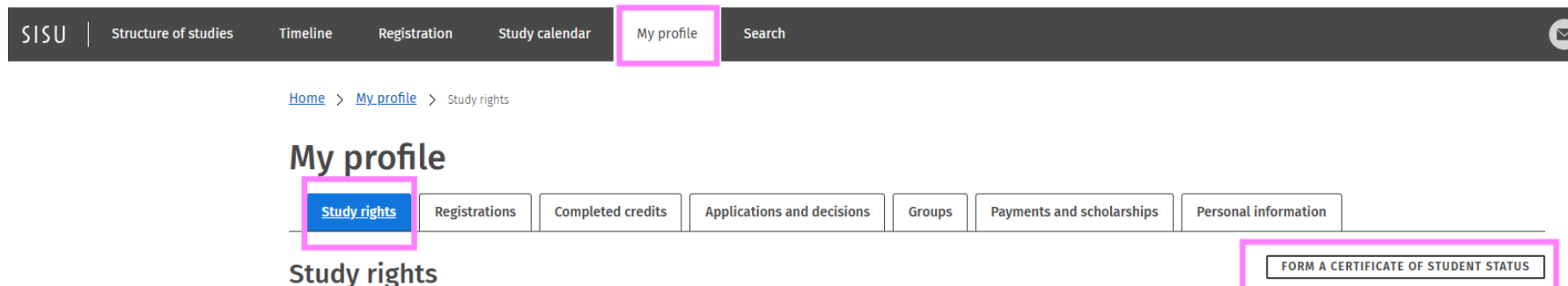
- [Contact Forum](#)
- [Job Teaser: How to master your job interview?](#)
- Events by [International House Helsinki](#)
- [LinkedIn työnhaussa: Parhaat käytännöt ja vinkit](#) (Webinair in Finnish by Talent Center)
- [Espoo Talent Match](#)

Examples of Companies Where Students Have Been on Practical Training

- ABB Oy
- Aidon OY
- Ainak Oy
- AKA Corporation Oy
- Borealis Polymers Oy
- Creators Oy
- Fennovoima Oy
- Finnvacum
- GA Telesis
- Muoviyhdistys ry
- Geberit Productions OY
- INKOO Shipping Oy
- Tiivistekeskus
- Plastoco
- Ensto
- NRG Finland Oy
- Nordex Energy GmbH
- Nord pipe composite engineering
- Saint-Gobain Finland Oy
- SEW EuroDrive
- Swappie Oy
- Termonova
- UPM
- Woodio Oy
- Wärtsilä
- Plastek
- Walki

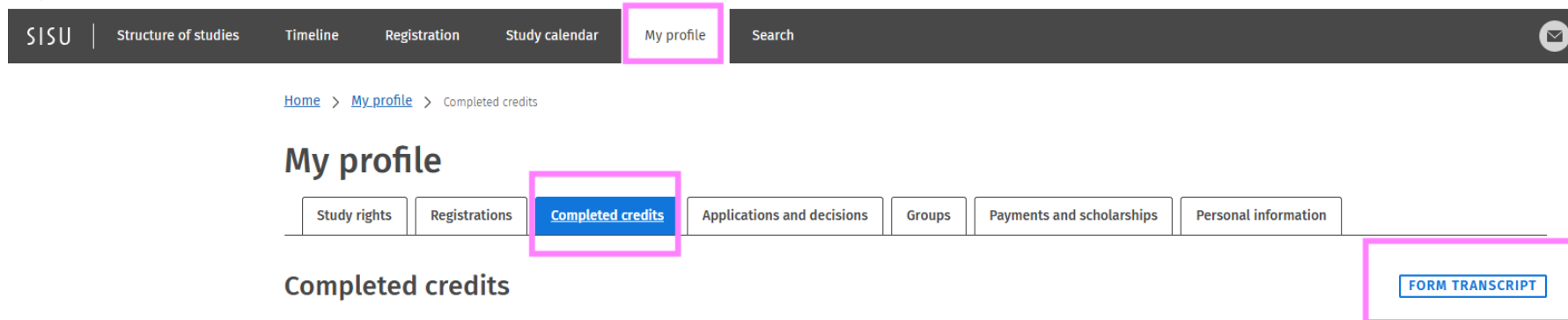
Certificate of Student Status & Transcript of records from Sisu

Certificate of Student Status:



The screenshot shows the Sisu website's navigation bar with 'My profile' highlighted. Below the navigation bar, the breadcrumb trail is 'Home > My profile > Study rights'. The 'My profile' section has a sub-menu where 'Study rights' is highlighted. A button labeled 'FORM A CERTIFICATE OF STUDENT STATUS' is visible in the bottom right corner of the profile area.

Transcript of records:



The screenshot shows the Sisu website's navigation bar with 'My profile' highlighted. Below the navigation bar, the breadcrumb trail is 'Home > My profile > Completed credits'. The 'My profile' section has a sub-menu where 'Completed credits' is highlighted. A button labeled 'FORM TRANSCRIPT' is visible in the bottom right corner of the profile area.



Exchange Studies?

- Why? Enriching experience on both academic and personal level
- Exchange studies are to be integrated in your degree and should not delay your graduation.
- Development studies / courses that replace obligatory courses at Arcada
- Find more information on Start:
 - <https://start.arcada.fi/en/my-studies/exchange-studies-and-practical-training-abroad/exchange-studies>
 - Christa will give an online info session in the beginning of September



arcada.fi

To Do

- Check that everything ok in SISU! (credits and personal information)
- Register for the academic year 26-27 (15.4–10.9)
- Tuition fee paying students:
 - Apply for the scholarship!
 - Pay the tuition fee!
- Course enrollment (10.8-30.8)
- Read your Arcada email regularly

Who to Contact?

- **Study Counsellor:**
 - individual study plans, selection of courses, slower/faster study pace and other study related questions.
- **International Student Advisor Laurits Møller:**
 - practical matters about living/studying in Finland
- **Student Affairs:**
 - Certificates, registration for the academic year, tuition fees, scholarships, student discounts, changes in the student registry, administration of accreditation etc.
- **Psychologist & Study social worker**
 - Wellbeing, lack of motivation, study technique
- **IT-Support; Library's Support; Career Services**

Questions?





**TACK!
THANK YOU!
KIITOS!**

Have a nice summer!



arcada.fi

arcada.fi





arcada.fi

Scholarships

- Scholarships are administered by Student Affairs
- Granted based on academic success
- Granted as deductions from the tuition fee, no cash payouts
- Students starting in 2024 can get a 40 % scholarship starting from their second year of studies

Scholarship requirements

- The student has completed an average of 55 ECTS per academic year with a grade point average of 4.5 or higher during their studies at Arcada.
- Please do not submit an application if you do not fulfill the criteria. If you are uncertain, you can ask Student Affairs.
- All info is available on start.arcada.fi/en/



How to and when to apply for a scholarship

- Apply through the scholarship form online.
- Apply as soon as you have the 55 ECTS registered in Sisu (as long as you meet the grade average requirement of 4.5)
- **Deadline to apply is 15 June 2026.** Late applications will not be accepted except for in very exceptional cases such as exchange studies or transfer of credits from other universities. Please contact studentaffairs@arcada.fi early on and discuss these cases with us so we are aware.

Paying the tuition fee

- Tuition fees are paid through Flywire.
- Apply for the scholarship first (if you are eligible)
 - Once you have received confirmation on a granted scholarship proceed to paying the tuition fee.
 - Tuition fee for those admitted in 2024 without a scholarship: 9500€ or 4750€/semester
 - Tuition fee for those with a scholarship: 5700€ or 2850€/semester.
 - The deadline for the fall semester's tuition fee is **15 August**
 - If paid in 2 installments – deadline for spring semester's tuition fee is **15 December**
 - Once Arcada has received the tuition fee we will send you a confirmation of payment and scholarship (if applicable to you) and register you as attending for the academic year.

Questions?

Student Affairs are responsible for the processing of tuition fees and scholarships.

Any questions regarding this should be directed to them

studentaffairs@arcada.fi

029 4282 535 (Thursdays 1–2 pm)



Helpful links regarding scholarships and tuition fees

- Find step-by-step instructions for Flywire payments here: <https://start.arcada.fi/en/my-studies/tuition-fees/tuition-fee-payment/tuition-fee-payment-step-by-step-instructions>
- Scholarship criteria: <https://start.arcada.fi/en/my-studies/tuition-fees/scholarships/scholarship-criteria#scholarship-criteria-if-you-were-admitted-in-2024>
- How to apply for a scholarship: <https://start.arcada.fi/en/my-studies/tuition-fees/scholarships#scholarship-application>