

Master in Metal Additive Manufacturing, 120 HE credits

Master i additiv tillverkning i metall, 120 hp

Programme code: TAMEA

Higher education qualification: Degree of Master of Science (120 credits) with a major in

Mechanical Engineering Cycle: Second cycle Established: 2020-10-13

Established by: Department of Engineering Science

Applies for: H21

Courses that the study programme comprises

By main field of study: Mechanical Engineering:

VSK600, Academic Writing, 3 HE credits, A1N

ADT610, Additive Manufacturing Processes, 7,5 HE credits, A1N

AMT601, Advanced Materials Science, 6 HE credits, A1N

CAB600, Computer Aided Manufacturing, CAM, 3 HE credits, A1N

UBM600, Fatigue and Fracture Mechanics, 6 HE credits, A1N

MOP600, Materials Characterization and Testing, 3,5 HE credits, A1N

OFP600, Non-Destructive Evaluation, NDE, 4 HE credits, A1N

FOM600, Phase Transformation, 6 HE credits, A1N

YTI600, Surface Engineering, 7,5 HE credits, A1N

MTS600, Metallurgy of Welding and Additive Manufacturing, 7,5 HE credits, A1F

EAT600, Post-treatment in Metal Additive Manufacturing, 6 HE credits, A1F

Options within the study programme



Elective and optional courses

The courses in the section "Options within the study program" are elective courses and 30 HE credits of these courses should be studied. Some or all these courses could be replaced by optional courses from University West or other higher education institutes, provided that these optional courses do not overlap with other courses within the program. Also, optional courses must contribute to the objectives of the Master of Metal Additive Manufacturing program.

The choice of optional courses should be approved by the program director at University West before taking these courses.

By main field of study: Automation:

INR600, Industrial robotics, 7,5 HE credits, A1N

By main field of study: Mechanical Engineering:

INR600, Industrial robotics, 7,5 HE credits, A1N

PTL600, Operations management, 7,5 HE credits, A1N

INP600, Industrial Placement, 15 HE credits, A1F

POM600, Process Simulation and Modeling, 7,5 HE credits, A1F

By main field of study: Production Technology:

INR600, Industrial robotics, 7,5 HE credits, A1N

PTL600, Operations management, 7,5 HE credits, A1N

Courses without main field of study:

SPF610, Statistical process control and Design of experiments, 7,5 HE credits, A1N

Entry requirements

Bachelor of Science degree in materials science and engineering, mechanical engineering, chemical engineering, manufacturing engineering, production technology, or equivalent. In addition, at least 7.5 HE credits in materials science, at least 15 HE credits in mathematics,



and English B/English 6 or equivalent are required.

Other regulations

Language

• The program is given in English.

Requirements within the program:

- For the Industrial Placement course, 15 HE credits, a completed result of 40 HE credits within the program is required.
- For the course, Master's thesis, Metal Additive Manufacturing, 30 HE credits, a completed result of 60 HE credits within the program is required.

A student who has been admitted to a programme with this programme syllabus is guaranteed a place on courses according to the study plan above, provided that the student follows the programme according to the study plan. The study plan and its courses may however be subject to change, within the framework of the qualitative targets, when revisions of education plans and syllabi are being made. Should the programme involve choosing a specialization, the student is guaranteed a place on courses concerning the chosen specialization.

Qualitative target

National outcomes uhr.se/en/start/laws-and-regulations/Laws-and-regulations/The-Higher-Education-Ordinance/