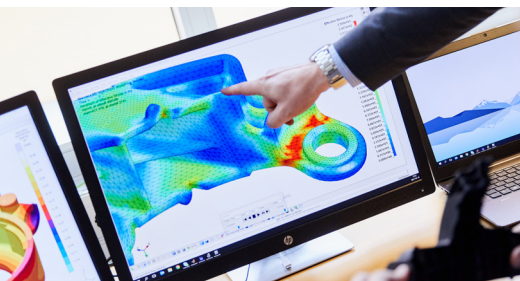




JÖNKÖPING UNIVERSITY  
*School of Engineering*

# MASTER IN PRODUCT DEVELOPMENT

SPECIALISED IN MATERIALS AND MANUFACTURING



BOOST YOUR CAREER AND PROMOTE INNOVATION IN THE FOUNDRY INDUSTRY

# STUDY OUR ONLINE MASTER PROGRAMME

Developed by The School of Engineering, the foundry industry, the Swedish Foundry Association and RISE SWECAST.

After the studies, you will be highly skilled and valued in various areas such as product development, purchasing and quality departments at the foundries and end users of cast components. Your degree allows you also for a research career at institutions and/or universities.

## PROGRAMME SHORT FACTS

- Online courses, studied half-time, give opportunities to combine studies with work and to study wherever you live.

- Access video lectures online and interact continuously with teachers and students via discussion forum and e-meetings.
- Intended for both professionals and students coming straight from university who want to specialize in cast materials and processes.
- Highly skilled and experienced scientists as teachers from academia/research institutes and related industries.
- Continuous and direct contact with related industries throughout the program, where industry relevant challenges are prioritized.

## COURSE OVERVIEW

SEMESTER 1 - AUTUMN 2019

SEMESTER 2 - SPRING 2020

COURSE BLOCK 1				COURSE BLOCK 2		
Component casting, 6 credits <b>W.34-41</b>	Melting and casting of ferrous alloys, 3 credits <b>W.41-44</b>	Moulding materials in foundry technology 3 credits <b>W.45-48</b>	Environmental impact assessment of castings 3 credits <b>W.49-02</b>	Material testing and characterization, 6 credits <b>W.3-10</b>	Failure analysis, 6 credits <b>W.11-18</b>	Cast design and calculation 3 credits <b>W.19-22</b>

SEMESTER 3 - AUTUMN 2020

SEMESTER 4 - SPRING 2021

COURSE BLOCK 3			COURSE BLOCK 4
Microstructural engineering, 6 credits <b>W.34-41</b>	Analysis of casting defects, 3 credits <b>W.41-44</b>	Modelling and simulation of castings, 6 credits <b>W.45-02</b>	Project work, 15 credits <b>W.3-22</b>

If you are interested in individual courses, please visit [ju.se/mam](https://ju.se/mam). The programme runs as half time and is taught in English.



“Sharing experiences and ideas with other people was just as important as new theoretical knowledge.”

- Satisfied student



## VOICES ABOUT THE PROGRAMME:



**Adriana Mura**

– I really liked the possibility to interact with, listen to and ask people how they work in different metallurgical areas and with different specializations. Except the fixed lessons, a lot of supplementary details and interesting in-depth studying emerged in the network.



**David Hall**

– Castings are becoming increasingly complex, particularly in the automotive sector. I feel therefore that the area of casting design is perhaps the most interesting and it was covered very well as part of the component casting module, using the latest simulation software.

More information on our web site  
**JU.SE/MAM**

The programme is run by Jönköping University with the task to strengthen Sweden's competitiveness and ability to create value in the foundry industry.