

# MEC-E7004 Industrial Project

Info Session

09th of September 2020

# Content of Info

- General course information
- Presentation of project assignments:  
VTK, Valmistustekniikan kerho,  
<http://www.valmistustekniikankerho.com/>
- Organization of project work pairs (max 3 persons)
- Selection(lottery) of project assignments

# VTK intro

(Club of Manufacturing Engineering Students)

- Project briefing & lottery to groups
- Lottery is based on selecting remaining topics/company
- 1-2 projects support directly current research at AM2, group is selected by Aalto supervisor (experimental work at Aalto University laboratory)

# Teachers

Project work supervisors at Aalto:

- Juha Huuki
- Pekka Kyrenius
- E-mail: `firstname.lastname@aalto.fi`
- Offices at K2 building, 1<sup>st</sup> and 2nd floor,  
address: Puumiehenkuja 3 (please contact  
before visit)

# Course in general

- Mandatory Prerequisite:
  - MEC-E7002 Manufacturing Methods I
  - MEC-E7003 Manufacturing Methods II
- Credits: 5 cr, appr. 120 hours
  - Project work 100 h and project report 20 h
  - Takes about 3 months in calendar time
- Periods: III-V (spring) and I-II (autumn)
- Most project topics are from local industrial companies
- Two students per one topic preferred

# Learning Outcomes

After the course the student:

- is able to perform a project in industrial setting.
- is able to work in a project team.
- can prepare a project plan and knows fundamentals of project management.
- is proficient in applying skills from previous courses.
- can formulate a practical solution to an industrial problem based on analysis.
- can write a technical report on project and selected solution.

# Important things

- instructor from company, supervisor from Aalto
- date of **company** kick-off meeting is agreed together with instructor and supervisor remotely with Teams
- Supervisor takes care of suitable limits of project work content and workload
- dates of intermediate review and end meeting are agreed in company kick-off meeting (possible changes in dates are agreed together as well)
- in the end meeting, supervisor asks company for project feedback

# Performing and scheduling of projects

1. Selection of project topics (info session)
2. Agreement of kick-off meeting (company representatives, work pair and supervisor from Aalto)  
Ask company (instructor) for three (3) suggestions for the date of kick-off meeting (in different days) and send the suggestions via e-mail to all supervisors at Aalto
3. Kick-off meeting at company remotely, starting project work and preparing project plan



## First visit (kick-off) to company

- supervisor from Aalto must be present!
- include all Aalto supervisor as cc in emails when you set up the date/time of kick-off
- To repeat: **supervisor from Aalto must be present!**

# Performing and scheduling of projects

4. Project work and reporting the progression of project
6. Intermediate session in Aalto for course participants
7. Intermediate review at company in the midway of project.
8. An end meeting in company when project is complete
9. Seminar presentations in Aalto for course participants and company representatives

# Project plan

- Soon after (ASAP) the kick-off meeting. 1st draft to Aalto Supervisor → OK → email to company contact person
- Project plan template in MyCourses
- Include mobile phone number, email for all actors (team, company, supervisor)
- Communication is 1-to-1 (only one contact in team, company, Aalto supervisor)

# E-mail report format

- Subject: [E7004] report [date] [Group-number]
  - template: **[E7004] report [2017-09-20] [Group-1]**
- Message body, :
  - **Report [2019-02-14 Last\_name, Last\_name, Last\_name]**  
template: Report 2019-02-14 Korhonen Smith Popov
  - **Tasks completed**
    - Bulleted list
    - If none is done: state that also
  - **Timetable & resources**
    - Timetable valid: yes/no
    - Used time budget total: 26% (group, resource per person x 120 h.)
    - Time budget valid: yes/no (estimated to the end of project)
  - **Problems**
    - If no problems, say so
    - If there is a problem, does it affect timetable (estimate)?
    - Planned actions to recover, next actionable step
    - Help/resources needed?
  - **Next steps**
    - Plan for next report period (list)
- report every 2 weeks, contact person is selected at company start
- report day is always **Monday**, notify of problems as soon as possible
- Report is short & clear, max. 1/2 pages.

# Report email sample

## **[E7004] report [2019-02-14] [Group-1]**

Report 2019-02-14 Korhonen Smith-Popov

- Visited 11.2.2019 Acme Ltd, had a meeting with foreman Joe Doe
- Had a factory tour
- Got old layout drawing
- Timetable valid: yes
- Used time budget total: 10%
- Time budget valid: yes
- No problems
- Next steps: visit to production Monday 25.2.2019 at 7:00

# Project notebooks

- Each group member have a \*paper\* notebook, \*dated\* notes are kept of all meetings and contacts
- Take your notebooks to kickoff!
- What was decided, who will act, due date
- Notes of phone calls/Skype/etc. including contact info; when, who, data
- Notebook is your timeline
- Note down your observations etc.
- Notebook is utilized for final report
- Do detailed notes during kickoff: many solutions surface when project is introduced
- Keep individual notes on hours spent
- Notebook is a physical notebook (any kind ok)

# Presentation of solutions at company at project end

- Present main solutions (and reasoning)
- Company management is usually very busy, therefore a prepare a condensed 10 (-20) min packet, max. 7 PowerPoint slides
- Focus on results, solutions and analysis
- Present “next steps” is any
- Reflect project objectives vs. results, brief resource utilization report is ok (own time budget)
- Skip company intro at companies, they do know their own company better
- Course end presentation is longer for students at Aalto, company intro is the ok
- End presentation date and time is published at MyCourses

# Final report template

- Guideline for Final report will be published at MyCourses



# Work load

- Introductory lecture 4 h
- Project work 100 h
- Preparing project report 20 h
- Seminar presentations 10 h

# Seminar presentation

- Each group will prepare a seminar presentation 15-20 min (FOCUS is on process and lessons learned)
- The seminar is held at Aalto
- This seminar is intended to share lessons learned between groups
- Please invite company representatives
- Seminar date will be announced later, duration 3 hours.