

Course syllabus for

## P68: Systems Engineering Introduction and Certification (Online course)

Syllabus adopted 2020-07-02 by Professor Bengt-Göran Rosén, Produktion2030 Head of Education



Credits	3 Hp (8 meetings of 2,5 hours + 3,5 hours of preparation + time for examination 32 hours total 80 hours)
Grading scale	Pass/Fail
Education cycle	Third-cycle
Examiner	Professor, Dag Bergsjö, Chalmers University of Technology
Eligibility	A Master's degree in engineering or equivalent
Aim	The course aims to give an introduction into the area of Systems Engineering according to INCOSE (International Council of Systems Engineer's).
Intended learning outcomes	After completion of the course the course participant should be able to participate at an official INCOSE certification event and be approved at such test.
Course content	The course is centred around the INCOSE Systems Engineering Handbook and is run as a "study circle". There will be 8 online meetings. One every week for 8 weeks, including each chapter of

the SE handbook as well as guest lectures giving insights into the SE process and practices.

Course organisation	8 online meetings for 8 weeks. At the end of the course a certification event will be scheduled in collaboration with INCOSE certification body.
Examination	Active participation at 6 of the 8 meetings. Presenting one of the topics at one meeting Approved at all online Quizzes. Providing questions as preparation for each seminar. Passing or taking the certification test is not needed to pass the course.
Literature	INCOSE Systems Engineering Handbook, Fourth Edition, Wiley INCOSE-TP-2003-002-04 2015 (Digital PDF format).

Study plan and reference to INCOSE handbook:

Date Fridays at 13:00-15:30	Section in SE Handbook	Content
2022-09-09	2 - 3	Overview & Life cycle, <i>Pre-course quiz</i>
2022-09-16	4 - 4.4	Technical processes part 1
2022-09-23	4.5 - 4.14	Technical processes part 2
2022-09-30	5	Technical Management processes
2022-10-7	6 - 7	Agreement processes, Org Proj-Enabling processes
2022-10-14	8	Tailoring <i>Mid-course quiz</i>
2022-10-21	9	Cross cutting SE methods
2022-10-28	10	Specialty Engineering <i>End-course quiz</i>
TBD		<i>Certification test in Gothenburg (or other location arranged by INCOSE)</i>