

TU/e Department Electrical Engineering, Stan Ackermans Institute,  
Post-Master's Designers' Program on Information and Communication Technology

Training and Coaching Scheme (template)

“Professional Doctorate in Engineering (PEng)”

update: 2009.03.16

Name PDEng candidate:			
Phone numbers:			
TU/e contract (from – till):			
Coach TU/e / Research Chair:			
Industrial coach:			
<b>Mandatory courses:</b>			
Nr.	TU/e ident. nr.		
1.)	9K010	Technical Writing and Editing	3 ECTS
2.)	9K091	Professional Development	4 ECTS
3.)	9K100	Methods and Techniques for Design	4 ECTS
4.)	5Z045	ICT Design and Teamwork “from idea to prototype” (in combination 9K091)	8 ECTS
5.)	5Z050	Design Methods for ICT-Systems (in combination with 9K091)	3 ECTS
6.)	TU/e	TU/e Workshop Scientific Integrity (0.5 day)	0 ECTS
7.)	TU/e	TU/e Workshop Technology Entrepreneurship (0.5 day)	0 ECTS
8.)	TU/e	TU/e Workshop Intellectual Property and Valorization (1 day)	0 ECTS
<b>Mandatory specialization courses SAI-ICT:</b>			
<i>Two courses (to be numbered 9. and 10.) out of the following list (a – j) are proposed by the TU/e coach/supervisor. He considers candidates' background, future interest, the requirements of the supervising TU/e Research Chair and requirements for the intended final (industrial) project. One or two remaining courses can be selected as “Elective Courses” (see below).</i>			
a)	5Z028	Specification of Complex Hardware/Software Systems	5 ECTS
b)	5Z032	Processor Design	4 ECTS
c)	5Z033	Advanced Computer Architecture	4 ECTS
d)	5Z034	Microstrip Antenna Analysis, Design and Verification	4 ECTS
e)	5N290 (5Z010)	Design of Digital Signal Processing Systems (Block A + B)	4 ECTS
f)	5P050	Capita Selecta in Electronics	4 ECTS
g)	5P630	Special topics in power electronics	4 ECTS
h)	5TT00	Optical Communication Networks	3 ECTS
i)	TNO Telecom, Delft	IMS – platform for IP-based applications in UMTS	4 ECTS
j)	TNO Telecom, Delft	UML – practice what you (pr/t)each	4 ECTS
<b>Elective courses:</b>			
<i>The total amount of credit points for elective courses should be (at least) 20 ECTS (1 ECTS = 28 h workload in average).</i>			
<i>At least five (elective) courses (numbers 11 – 15), to be proposed by the TU/e coach/supervisor, to provide the PDEng candidate the required basic knowledge for the future (industrial) project. The courses can be chosen from regular M.Sc.-courses offered in the TU/e Department Electrical Engineering, as well as courses from other Departments (or universities), courses from other TU/e Stan Ackermans Institute Designers' post-masters Designer programs (for example Software Technology). Furthermore, one or two remaining courses from the list of offered specialization course (a – j) can be chosen.</i>			
11.)			
12.)			
13.)			
14.)			
15.)			
<i>In case the preparation of the candidate for the final project requires a literature study, case study, or other (internal or external) assessments additional ECTS can be awarded in section “Elective courses”.</i>			
<b>Final project:</b>			
16.)	9K110, mandatory	Project Based Management	2 ECTS
17.)	TU/e, mandatory	Preparation for final project (supported by Research Chair)	0 ECTS
18.)	5Z500, mandatory	Final project (in average 12 months full-time)	60 ECTS
<b>Enrichment courses:</b>			
	TU/e CeMAS	Courses like: LaTeX, C++, Unix/Linux (on candidate's request)	0 ECTS
	TU/e STU	Dutch Course incl. examination (on candidate's request)	0 ECTS
	TU/e STU	Applying for a job (on candidate's request)	0 ECTS

<http://owinfo.tue.nl/> - general information about courses offered by TU/e

<http://www.ooti.win.tue.nl/> - TU/e SAI Designer's Program Software Technology

<http://www.win.tue.nl/cemas/en/ictcursussen.html> - TU/e Centre for Mathematical Applications and Software (CeMAS)