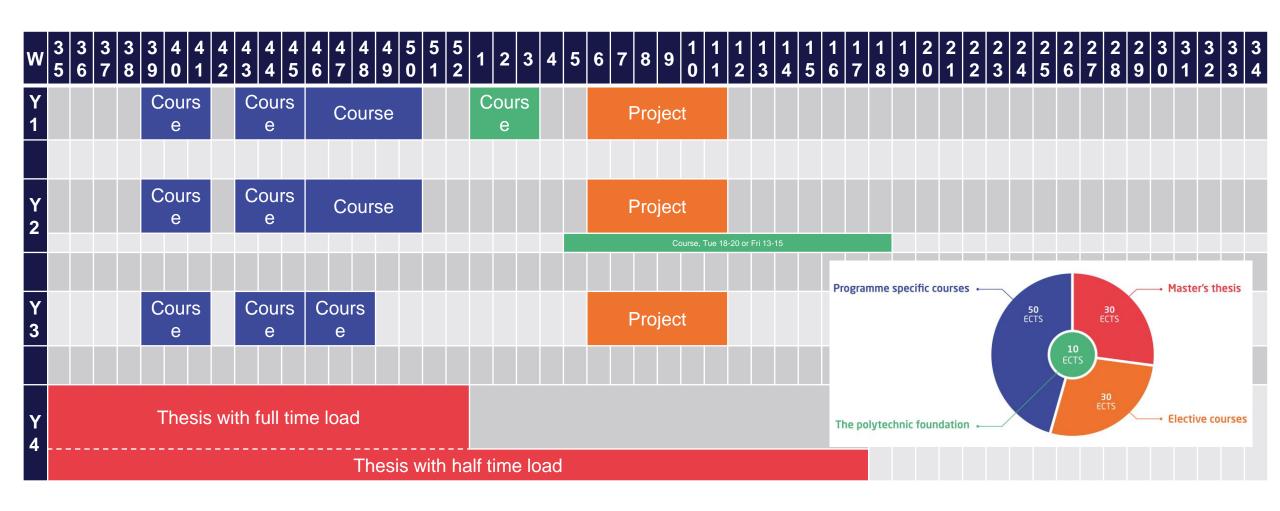


Study plan Biomanufacturing - start odd years

SEMESTER	CONTENT
1	28745 Industrial cell-based reaction engineering. 5 ECTS. 28761 Mathematical modeling for industrial applications. 5 ECTS. 28720 Downstream Processing. 7.5 ECTS.
2	42500 Innovation in Engineering. 5 ECTS. 28737 Applied Chromatography Project – including Innovation aspects. 10 ECTS.
3	28730 Transport Phenomena (with Fluid Dynamics). 5 ECTS. 28751 Control systems in biomanufacturing. 5 ECTS. 28750 Systematic Methods for Process Design and Analysis. 7.5 ECTS.
4	12100/12101 Quantitative Sustainability. 5 ECTS. 28747 Project related to Process Design, Risk Assessment, or Reaction Engineering – including Sustainability aspects. 10 ECTS.
5	28725 Advanced Unit Operations Lab – including digitalization. 5 ECTS. 28757 Good Manufacturing Practice (GMP). 5 ECTS. Course to be decided. 5 ECTS.
6	28777 Project related to Kalundborg Symbiosis (including presentations of all the involved companies). 10 ECTS.
7	MSc project related to company. Graduation. 30 ECTS
8	



Yearly schedule for courses - start odd years





Study plan Biomanufacturing - start even years

SEMESTER	CONTENT
1	28730 Transport Phenomena (with Fluid Dynamics). 5 ECTS. 28751 Control systems in biomanufacturing. 5 ECTS. 28750 Systematic Methods for Process Design and Analysis. 7.5 ECTS.
2	12100/12101 Quantitative Sustainability. 5 ECTS. 28747 Project related to Process Design, Risk Assessment, or Reaction Engineering – including Sustainability aspects. 10 ECTS.
3	28745 Industrial cell-based reaction engineering. 5 ECTS. 28761 Mathematical modeling for industrial applications. 5 ECTS. 28720 Downstream Processing. 7.5 ECTS.
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Yearly schedule for courses - start even years

