

CHEMICAL ENGINEERING MASTER'S PROGRAM

Special track Hydrogen Systems and Enabling Technologies (HySET)

Year 1 Full HySET 60 ECTS program @ Politecnico di Torino or Politecnico di Milano

Year 2 Master Chemical Engineering HySET track 60 ECTS TU/e

Entry requirement year 2 for TU/e

Have obtained 50 ECTS of the first program by 31st August 2024. The remaining ECTS need to be completed in combination with the second-year program. Official transcript of records must be submitted in time.

Compulsory study components year 2 HySET at the TU/e

Period	Code and Course name	Compulsory/ Elective	Credits
Semester 1 Q1 + Q2	6HySET05 Preparation for graduation project HySET track	Compulsory	15
	Specialization elective courses, in consultation with your mentor	Elective	15
Semester 2 Q3 + Q4	6HySET00 HySET Graduation project	Compulsory	30

Specialization elective courses

Course code	Course name	Quarter	Time slot	Credits
6CPT10	Advanced Transport Phenomena	Q1	D	5
6EMA01	Micro Flow Chemistry and Process Technology	Q1	A	5
6EMA02	Particle-based Simulations	Q1	B	5
6MSM10	Physical Organic Chemistry	Q1	C	5
6EMA51	Characterization of Materials	Q1	B	5
6EMA53	Molecular Photo physics	Q1	E	5
6CPT20	Catalysis, Science and Technology	Q2	E	5
6EMA08	Multiphase Computational Fluid Dynamics	Q2	D	5
6EMAC1	Essentials for Polymer Reactor Engineering	Q2	A	5
6EMAC5	Polymer Membranes for Sustainable Process Applications	Q2	B	5
6EMAC8	Theoretical and Computational Chemistry	Q2	D	5
6MSM31	Polymer and Colloid Science	Q2	C	5
6EMA64	Molecular Photo Chemistry	Q2	E	5
6EMA63	Sustainable Polymer Chemistry and Materials	Q3	B	5
6EMA61	Advances in Molecular Chemistry	Q3	E	5
6EMA59	Experimental Soft Matter	Q3	A	5
6EMAC2	Modern Concepts in Catalysis	Q3	C	5
6EMAC6	Electrochemical Engineering	Q3	D	5
6EMA52	Coatings Science and Technology	Q4	A	5
6EMA62	Advanced Materials for Soft Robotics	Q4	D	5
6EMA55	Mechanical Behavior and Rheology	Q4	E	5

Course descriptions and information about the study schedule can be found in OSIRIS Catalog:

<https://tue.osiris-student.nl/#/onderwijs/catalogus/extern/cursus?taal=en>

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The courses are all planned according to the timeslot model as shown underneath:

	Monday	Tuesday	Wednesday	Thursday	Friday
1+2 (8:45-10:30)	A1	C1	B1	E1	D1
3+4 (10:45-12:30)	A2	C2	B2	E2	D2
5+6 (13:30-15:15)	B1	E1	D1	A1	C1
7+8 (15:30-17:15)	B2	E2	D2	A2	C2
9+10 (17:30-19:15)	E3	D3	A3	B3	