

Course: Physical Chemistry

credits: 5

Course code CCVP23FYSCHEMIE
Name Physical Chemistry
Study year 2026-2027
ECTS credits 5
Language Dutch, with parts in English
Coordinator R.A. Knigge

Modes of delivery Lecture
 Practical / Training
 Project-based learning
Assessments Fysische Chemie Theorie - Written, organised by STAD examinations
 Practicum - Other assessment

Learning outcomes

This module has the following learning outcomes:

You describe and predict the influence of intermolecular attraction forces on physical properties such as phase transition temperatures, surface tension and viscosity.

You describe and calculate the heat effects of phase transitions of substances and temperature changes.

You describe the operation of single distillation.

You carry out simple research individually and in groups in a safe and responsible way and communicate about it via a logbook and/or result form according to the applicable guidelines.

DAS competencies

Competency Level (I-IV)

Research I

Experimentation I

Development

Management

Advise

Instruction

Leadership

Self-management I

Content

This module covers the influence of intermolecular interactions on the physical properties of substances, such as viscosity and surface tension. It also covers the influence of temperature on physical properties, with particular reference to distillation. During the corresponding practical, a simple distillation is performed. In addition, the influence of temperature on viscosity is investigated during the project.

Basic knowledge of atomic structures is assumed to be familiar.

Included in programme(s)

Chemistry
 Chemical Engineering

School(s)

Engineering, Life Sciences & ICT