

11 Päätösasia/Decision item: Maisteriohjelmien portfoliouudistustyön reunaehdot: ohjelmarakenne / Boundary conditions in the master's programme portfolio renewal: programme structure (Pauliina Ketola)

Perustelut/Justification

Master's Programme in Chemical, Biochemical and Materials Engineering - ohjelman portfoliosuunnittelutyö on painottunut ohjelmiin, jotka perustuvat Kemian tekniikan korkeakoulussa tehtävän tutkimuksen strategisiin painopistealueisiin. Ohjelmiin on aiemmin viitattu termillä klusteri. Suunnittelutyön ohjaamiseksi päätetään suunnittelua sitovista reunaehdoista.

While planning the portfolio renewal regarding the Master's Programme in Chemical, Biochemical and Materials Engineering, the strategic research focus areas of the school have been emphasized in the new programmes. Previously these programmes have been referred as clusters. For further guidance in planning the portfolio renewal, binding boundary conditions must be decided.

Liitteet/Appendices

Korjattu liite/Updated attachment 8 Portfolio renewal - programme structure

Päätösesitys/Decision proposal

Vahvistetaan Koulutusneuvoston esityksen (liite 8) mukaisesti, että portfoliouudistustyön seurauksena perustettavien ohjelmien rakenne muodostuu seuraavasti:

- Koulutusohjelmaopinnot, sisältäen pääaineopinnot: 60-65 opintopistettä
- Opinnäytetyö (diplomityö), mukaan lukien kypsyysnäyte: 30 opintopistettä
- Vapaavalintaiset opinnot: 25-30 opintopistettä

Yllä mainittujen opintokokonaisuuksien yhteislaajuus on 120 opintopistettä.

According to the proposal by the Degree Programme Committee (attachment 8) it will be confirmed that the structure of the degree programmes established as a result of the portfolio renewal is as follows:

- Core studies of the degree programme, including major studies: 60-65 credits
- Master Thesis, including maturity essay: 30 credits
- Elective studies: 25-30 credits

The full extent of the above-mentioned studies is 120 credits.

Kokouskäsitely/Handling of the matter

Anni Rintala esitteli asian Pauliina Ketolan poissaollessa (liite 8).

Kemian tekniikan akateeminen komitea
Academic Committee for Chemical Engineering

Pöytäkirja/Minutes

Kokous/Meeting 7/2022

Aika/Time: 29.11.2022 klo/at 13:00

Paikka/Venue: A303

Julkinen

Anni Rintala presented this item because Pauliina Ketola was absent from the meeting (attachment 8).

Päätös/Decision

Päätettiin esityksen mukaisesti opintopistemäärien reunaehdoista ohjelmarakenteessa. Lisäksi keskustelun pohjalta korjatun esityksen mukaisesti päätettiin, että ohjelmarakenteessa käytetyt sanamuodot korjataan seuraamaan Aalto-yliopiston tutkintorakenteessa käytettyjä sanamuotoja (korjattu liite 8, dia nro 10). / *The motion on the boundary conditions was passed as proposed regarding the credits in the structure of the degree programmes. In addition, based on the discussion, it was decided that the wording used regarding the structure of degree programmes will be changed so that it will follow the wording of Aalto University Degree Regulations (updated attachment 8, slide number 10).*

**Esitys portfolio uudistuksen reunaehdoksi:
ohjelmarakenne
Proposal for boundary condition for Ms Portfolio
renewal work: programme structure**

Päätösehdotus/Proposal

KTAK/Academic Committee for Chemical Engineering



Aalto University
School of Chemical
Engineering

Pauliina Ketola

29.11.2022 – korjattu/ updated 2.12.2022

Taustaa/Background

Development of the portfolio in four clusters

Cluster leads nominated by the departments

Bioproducts engineering
Biomass-refining and advanced lignocellulosic materials

Cluster lead:
Eero Kontturi

Molecular bioscience and Industrial biotechnology

Cluster lead:
Alexander Frey

Chemical and metallurgical engineering

Chemical-engineering and circular-processes

Cluster lead:
Marjatta Louhi-Kuitanen

Chemistry and materials science

Chemistry for renewable energy and functional materials

Cluster lead:
Kari Laasonen

- Biomass refining
- Fiber and Polymer Engineering
- **N5P in Polymer Technology** (discontinuing)
- Biological and Chemical Engineering for a Sustainable Bioeconomy (Bioceb)

- Biotechnology
- **Biosystems and Biomaterials engineering**

- Chemical and Process Engineering
- Sustainable Metals Processing
- **Industrial Energy Processes (Advanced Energy solutions)**
- European Mining, Minerals and Environmental Programme (EMMEP)

- Chemistry
- Functional Materials
- Advanced Materials for Innovation and Sustainability (AMIS)
- Master's Programme in Energy Storage

Cluster leads will lead the discussion and development work in the cluster. Responsibility to take forward development actions and participate in portfolio renewal steering group work.

MSc study offerings:
CHEM own offerings
AALTO Joint offerings
International offerings

- **International Design Business Management (IDBM)** -> (includes compulsory CHEM minor)
- **Creative Sustainability CHEM** (connects to research focus area 1 & 3)
- Environmental Pathways for Sustainable Energy Systems (SELECT) -> selected courses from all study fields (discontinuing)

Alustava aikataulu uudistukselle/ Provisional timeline for renewal

Forthcoming decision items

This year:

- Application target and programme structure discussed and finalised
Nov-Dec 22

Early spring:

- Programme names and programme-level ILOs discussed and finalised
in Jan-Feb 23 DPC & KTAK
- Programme proposal by Dean to President in Feb-Mar 23

Ohjelmarakenne Aallon tutkintosaännössä/ Programme structure in Aalto Degree Regulations

Structure guidelines from Aalto University Degree Regulations

Major studies 40-65 cr, of which at least 30 are for advanced studies

Master's thesis 30 cr

Elective studies or minor 50-25 cr
(if over 30 cr, then minor should be included)

Päätösehdotus: Uusien ohjelmien ohjelmarakenne Proposal: Programme structure of new programmes

School-level programme structure

- **Proposed: Shared structure across Master's programmes in CHEM:**
 - **Studies towards the major: 60-65 credits**
 - **Thesis, including a maturity essay: 30 credits**
 - **Elective studies: 25-30 credits**