

Onderwijs- en examenregeling

Masteropleiding Drug Discovery & Safety

Deel B:

Opleidingsspecifiek deel

Studiejaar 2014-2015

Teaching and Examination Regulations

Master's programme in Drug Discovery & Safety

Part B:

Programme-specific section

Academic year 2014-2015

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1. Algemene bepalingen

Artikel 1.1 Gegevens opleiding

1. De opleiding Drug Discovery & Safety, CROHO nummer 66989 wordt in voltijdse vorm verzorgd, en in het Engels uitgevoerd.
2. De opleiding heeft een omvang van 120 EC.
3. Een onderwijseenheid omvat 6 EC of een veelvoud daarvan. Onderstaande onderwijseenheden hebben een afwijkende omvang:

Vakcode	vaknaam	ec
X_432517	Ethics and Academic Skills	3
X_432726	Ethics and Academic Skills	2
X_432725	Ethics and Academic Skills	1
X_432741	Teaching Assistant	3
X_400592	Scientific Writing in English	3
X_432625	Tutoring Students	3
AM_470707	Ethics in Life science	3
AM_471017	History of Life Sciences	3
X_432539	Business and Innovation in Life Science	3
AM_470805	Ethics in Public Health	3
AM_470565	Caput Dilemmas in the Implementation of Public Health Programmes	3
AM_470567	Caput Institutionalising Participatory Approaches in the South	3
AM_470569	Caput Knowledge Integration and (patient) Participation	3

Artikel 1.2 Instroommoment

De opleiding wordt aangeboden met ingang van het eerste semester van een studiejaar (1 september). Voor dit instroommoment geldt dat er sprake is van een studeerbaar onderwijsprogramma dat in de nominale duur volledig afgerond kan worden.

2. Doelstellingen en eindtermen van de opleiding.

Artikel 2.1 Doelstelling opleiding

De doelstelling van de opleiding is dat studenten zodanige kennis, vaardigheden en inzicht verwerven op het gebied van de Drug Discovery & Safety en eventuele hulpdisciplines, dat zij in staat zijn tot een zelfstandige beroepsuitoefening op academisch niveau, dan wel in aanmerking komen voor een vervolgopleiding tot wetenschappelijk onderzoeker of ontwerper. De opleiding beoogt tevens de bevordering van inzicht in de samenhang der wetenschappen en van maatschappelijk verantwoordelijkheidsbesef.

Part B: Programme-specific section

1. General provisions

Article 1.1 Programme details

1. The programme in Drug Discovery & Safety (CROHO number 66989) is a full-time programme taught in English
2. The programme consists of 120 credits.
3. An educational unit comprises 6 credits or a multiple thereof. The educational units shown below have a different credit load:

Subject code	Subject name	Credits
X_432517	Ethics and Academic Skills	3
X_432726	Ethics and Academic Skills	2
X_432725	Ethics and Academic Skills	1
X_432741	Teaching Assistant	3
X_400592	Scientific Writing in English	3
X_432625	Tutoring Students	3
AM_470707	Ethics in Life science	3
AM_471017	History of Life Sciences	3
X_432539	Business and Innovation in Life Science	3
AM_470805	Ethics in Public Health	3
AM_470565	Caput Dilemmas in the Implementation of Public Health Programmes	3
AM_470567	Caput Institutionalising Participatory Approaches in the South	3
AM_470569	Caput Knowledge Integration and (patient) Participation	3

Article 1.2 Start date

The programme starts each year in the autumn (1 September). Students who start the programme on this date will normally be able to complete the full course of studies within the set time frame and graduate on time.

2. Programme objectives and exit qualifications

Article 2.1 Programme objectives

The objective of the programme is that students should acquire sufficient knowledge, skills and insight within the field of Drug Discovery & Safety, and any related disciplines, to be able to operate as an independent professional at an academic level, and to be a suitable candidate for a subsequent course of study leading to a career in research or development. Another aim of the programme is to develop students' understanding of the interrelationships between academic disciplines, as well as their sense of social responsibility.

Artikel 2.2 Eindtermen

A. De Master of Science in DDS:

- Heeft een gedegen theoretische en praktische kennis van de moderne farmaceutische wetenschappen (met inbegrip van de daarvoor noodzakelijke kennis van andere disciplines)
- Heeft grondige kennis van theoretische en experimentele methoden en onderzoekservaring op ten minste een deelgebied binnen de farmaceutische wetenschappen
- Is in staat om zich binnen redelijke termijn in te werken in andere deelgebieden van de discipline
- Is in staat een onderzoekswerkplan te formuleren op basis van een realistische vraagstelling binnen de farmaceutische wetenschappen
- Is in staat onderzoeksresultaten te analyseren en formuleren en daar conclusies uit te trekken
- Is in staat een verslag dan wel internationaal toegankelijke wetenschappelijke publicatie te schrijven en deel te nemen aan een discussie over een vakonderwerp
- Is in staat (internationale) vakliteratuur op relevante deelgebieden te raadplegen en te benutten
- Is in staat kennis van de farmaceutische wetenschappen toe te passen in een bredere (multidisciplinaire) context
- Kan omgaan met veiligheids en milieuaspecten van de farmaceutische wetenschappen
- Is inzetbaar in die functies waarin kennis en onderzoeksvaardigheden op het gebied van de farmaceutische wetenschappen de vereisten zijn
- Heeft voldoende kennis van en inzicht in de maatschappelijke rol van de farmaceutische wetenschappen om tot een verantwoorde beroepskeuze en beroepsuitoefening te kunnen komen
- Is in staat samen te werken met anderen, kennis aan anderen over te dragen, een voordracht te houden voor zowel vakspecialisten als een breder publiek

B. De masteropleiding Drug Discovery & Safety kent vier varianten: een onderzoeksvariant (O-variant), een communicatieve en educatieve variant (C/E-variant), en een maatschappelijke variant (M-variant). De specifieke eindtermen die betrekking hebben op deze varianten zijn:

O-variant

De afgestudeerde:

- kan zelfstandig experimenten en de bijbehorende controles bedenken, uitvoeren en evalueren binnen een gegeven tijdbestek
- kan de verkregen resultaten en conclusies plaatsen in het kader van door anderen verkregen resultaten.
- kan een visie vormen ten aanzien van de ontwikkeling van het wetenschappelijk onderzoek binnen het vakgebied;
- kan scheikundige processen kwantitatief en kwalitatief analyseren, de gegevens in bestaande of te ontwikkelen modellen onderbrengen en de uitkomsten op verschillende abstractieniveaus

Article 2.2 Exit qualifications

A. The Master of Science in Drug Discovery & Safety

- has a sound theoretical and practical understanding of the modern pharmaceutical sciences (including the requisite knowledge of other disciplines)
- has a thorough knowledge of theoretical and experimental methods, as well as research experience in at least one sub-field of pharmaceutical sciences
- is capable, within a reasonable period of time, of becoming conversant in other sub-fields of the discipline
- is capable of formulating a work plan for research within the pharmaceutical sciences, on the basis of a realistic research question
- is capable of analysing and formulating research results, and of drawing conclusions from them
- is capable of writing a report or an academic paper for publication in an international journal, and of participating in a discussion on a topic related to the field of study in question
- is capable of studying the professional literature (including international publications) in relevant sub-fields, and of making use of the discussions and results found there
- is capable of applying knowledge of the pharmaceutical sciences within a wider, multidisciplinary context
- is capable of dealing with the safety and environmental aspects of the pharmaceutical sciences
- is capable of taking on posts for which knowledge and research skills in the field of the pharmaceutical sciences are required
- has sufficient knowledge of and insight into the social role of the pharmaceutical sciences to decide on a responsible choice of profession and professional practice
- is capable of cooperating with others, of imparting knowledge to others, and of delivering a lecture both to specialists and to a wider audience

B. The Master's programme in Drug Discovery & Safety has four variants: a research variant (R variant), a communication/education variant (C-E variant), and a social variant (S variant). The specific final attainment levels that relate to these variants are:

R variant

The graduate:

- is capable of independently designing, conducting and assessing experiments and the associated controls within a given period of time;
- is capable of contextualizing the results and conclusions obtained, within the framework of results obtained by others;
- is capable of formulating a perspective on the development of scientific research within the field in question;
- is capable of quantitatively and qualitatively analysing chemical processes, of entering the data into existing

- presenteren;
- dient inzicht te hebben in de rol van de farmaceutische wetenschappen in een duurzame samenleving

C-variant

De afgestudeerde kan:

- zelfstandig nieuwe vakkennis verwerven op het gebied van communicatie en deze toepassen in een communicatieve beroepssituatie;
- verworven kennis en inzicht overdragen in woord en geschrift naar een breder publiek.

E-variant

De afgestudeerde kan:

- zelfstandig nieuwe vakkennis verwerven op het gebied van educatie en deze toepassen in een educatieve beroepssituatie;
- verworven kennis en inzicht overdragen in woord en geschrift in een onderwijssituatie.

M-variant

De afgestudeerde kan:

- een visie ontwikkelen ten aanzien van de mogelijke bijdrage van natuurwetenschappelijke kennis en methoden aan het oplossen van vakgerelateerde maatschappelijke problemen;
- een oplossingsgerichte wetenschappelijke vraagstelling uit deze visie destilleren;
- vraagstellingen in een doelgericht onderzoek implementeren;
- gegevens verkregen uit analyses op verschillende schalen en abstractieniveaus interpreteren en presenteren;
- in een multidisciplinair projectteam samenwerken.

De opleiding besteedt aandacht aan:

- de persoonlijke ontplooiing van de student,
- het bevorderen van het maatschappelijk verantwoordelijkheidsbesef van de student,
- het bevorderen van de uitdrukingsvaardigheid en wetenschappelijke leesvaardigheid in het Nederlands, dan wel in het Engels.

- models (or models yet to be developed), and of presenting the results at various levels of abstraction;
- must possess insight into the role of the pharmaceutical sciences in a sustainable society.

C variant

The graduate can:

- independently acquire new knowledge of the subject in the area of communication and can apply this in appropriate professional situations;
- impart any knowledge and insights obtained, verbally and in writing to wider audiences.

E variant

The graduate can:

- independently acquire new knowledge of the subject in the area of education, and can apply this in appropriate professional situations;
- impart any knowledge and insights obtained, verbally and in writing in appropriate educational settings.

S variant

The graduate can:

- develop a perspective on the contributions that scientific knowledge and methods can potentially make to social problems related to the field in question;
- distil a research question from this perspective that is geared towards solutions;
- implement such questions in the form of targeted research;
- interpret and present data obtained from analyses conducted at different scales and different levels of abstraction;
- cooperate with others in the context of a multidisciplinary project team.

The programme emphasizes:

- the student's personal development;
- promoting the student's sense of social responsibility;
- promoting the student's communication skills and academic literacy in Dutch or in English.

3. Nadere toelatingseisen

Artikel 3.1 Toelatingseisen

1. Toelaatbaar tot de opleiding is de bezitter van een bewijs van toelating, verstrekt door of namens het faculteitsbestuur, omdat hij heeft aangetoond te voldoen aan de toelaatbaarheidseisen van kennis, inzicht en vaardigheden op het eindniveau van een wetenschappelijke bacheloropleiding.
2. Vooropleidingseisen:
 - Het bachelordiploma Farmaceutische Wetenschappen van een Nederlandse Universiteit.
 - Het bachelordiploma Scheikunde, mits de vooropleiding voldoet aan de gestelde vooropleidingseisen, zulks ter beoordeling van de examencommissie.
 - Eventuele deficiënties zullen vooraf of tijdens de masteropleiding moeten worden weggewerkt.
 - Het bachelordiploma Medische natuurwetenschappen, mits de vooropleiding voldoet aan de gestelde vooropleidingseisen, zulks ter beoordeling van de examencommissie.
 - Eventuele deficiënties zullen vooraf of tijdens de masteropleiding moeten worden weggewerkt.
 - Het diploma van een relevante HBO-opleiding, mits de vooropleiding voldoet aan de gestelde vooropleidingseisen, zulks ter beoordeling van de examencommissie.
 - Eventuele deficiënties zullen vooraf of tijdens de masteropleiding moeten worden weggewerkt.
 - Een bachelordiploma Farmaceutische wetenschappen of equivalent van een buitenlandse universiteit, mits de vooropleiding voldoet aan de gestelde vooropleidingseisen, zulks ter beoordeling van de examencommissie.
 - Eventuele deficiënties zullen vooraf of tijdens de masteropleiding moeten worden weggewerkt.
 - Engels op het niveau van het eindexamen vwo.
3. Indien sprake is van verschillende tracks binnen de opleiding, toetst de examencommissie of door de aanvrager is voldaan aan de specifieke eisen.
4. Degene die nog niet in het bezit is van een bachelorgraad, maar wel voldoet aan de eisen van kennis, inzicht en vaardigheden, vermeld in lid 2, kan desgevraagd voorwaardelijk worden toegelaten tot de aansluitende masteropleiding, voor zo ver het achterwege laten van de inschrijving zou leiden tot een onbillijkheid van overwegende aard.
5. Het bewijs van toelating heeft uitsluitend betrekking op het studiejaar dat gelegen is na het studiejaar, waarin de aanvraag voor dat bewijs is ingediend, tenzij het college van bestuur anders beslist.

Artikel 3.2 n.v.t

Artikel 3.3 n.v.t

3. Further admission requirements

Article 3.1 Admission requirements

1. Applicants will be admitted to the degree programme if they hold a letter of acceptance, issued by or on behalf of the Faculty Board because they have demonstrated that they meet the knowledge, understanding and skills requirements of the final level of attainment in a university Bachelor's degree programme.
2. Prior education requirements:
 - a Bachelor's degree in Pharmaceutical Sciences from a Dutch university;
 - a Bachelor's degree in Chemistry, provided it meets the prior education requirements, to be assessed by the Examination Board
 - (any deficiencies will need to be addressed prior to or during the Master's programme);
 - a Bachelor's degree in Medical Natural Sciences, provided it meets the prior education requirements, to be assessed by the Examination Board
 - (any deficiencies will need to be addressed prior to or during the Master's programme);
 - a Bachelor's degree from a relevant programme at a university of applied sciences (HBO), provided it meets the prior education requirements, to be assessed by the Examination Board
 - (any deficiencies will need to be addressed prior to or during the Master's programme);
 - a Bachelor's degree in Pharmaceutical Sciences or equivalent from a foreign university, provided it meets the prior education requirements, to be assessed by the Examination Board
 - (any deficiencies will need to be addressed prior to or during the Master's programme);
 - a command of English equivalent to final-examination university entry level (VWO level under the Dutch school system).
3. If the degree programme consists of distinct tracks or specializations, the Examination Board will assess whether the applicant has met the applicable requirements.
4. Those not yet in possession of a Bachelor's degree, but who meet the admission requirements as regards the knowledge, insight and skills specified in paragraph 2, may on request be granted conditional admission to the associated Master's programme, insofar as failure to grant admission would result in undue unfairness.
5. The letter of acceptance relates exclusively to the academic year following the academic year in which the application for the letter of acceptance was submitted, unless the Executive Board decides otherwise.

Article 3.2 not applicable

Article 3.3 not applicable

Artikel 3.4 Uiterste termijn aanmelding

1. Aanmelding, via Studielink, voor een masteropleiding door een student die geen bachelorexamen heeft behaald aan de VU is alleen mogelijk tot en met 31 mei 2014.
2. In afwijking van lid 1 dienen studenten die gebruik wensen te maken van diensten van het International Office op het gebied van visumbemiddeling en huisvesting zich voor 1 april 2014 aan te melden.
3. Inschrijven voor een masteropleiding is mogelijk tot en met 31 augustus 2014.
4. Een student die aan de VU een bacheloropleiding heeft gevolgd en een masteropleiding wil volgen, kan zich aanmelden en inschrijven tot en met 31 augustus 2014.

Artikel 3.5 Taaleisen Engels bij Engelstalige masteropleidingen

1. Aan de eis inzake beheersing van de instructietaal Engels, is voldaan na het met goed gevolg afleggen van één van de volgende examens of een equivalent daarvan:
 - IELTS: 6.5
 - TOEFL paper based test: 580
 - TOEFL internet based test: 92-93
 - Cambridge Advanced English: A, B of C.
2. Vrijstelling van het een in het eerste lid genoemd examen Engels wordt verleend aan degene die vwo examen Engels heeft afgelegd of die niet langer dan twee jaar voor aanvang van de opleiding:
 - heeft voldaan aan de eisen van de VU-test Engelse Taalvaardigheid TOEFL ITP, minimaal met de scores zoals bepaald in het eerste lid, of
 - een vooropleiding secundair of tertiair onderwijs heeft genoten in een Engelstalig land dat als zodanig is vermeld op de website van de VU, of
 - die over een diploma 'international baccalaureate' (Engelstalig) beschikt

Artikel 3.6 Vrij programma

1. De student heeft de mogelijkheid om, onder bepaalde voorwaarden, een eigen onderwijsprogramma samen te stellen dat afwijkt van de door de opleiding voorgeschreven onderwijsprogramma's.
2. De samenstelling van een dergelijk programma behoeft de voorafgaande goedkeuring van de examencommissie die daarvoor het meest in aanmerking komt.
3. Het vrije programma wordt door de student samengesteld uit de onderwijseenheden die door de Vrije Universiteit worden verzorgd en heeft ten minste de omvang, breedte en diepgang van een reguliere masteropleiding.

Article 3.4 Registration deadline

1. Students who wish to apply for a Master's programme and have not obtained their Bachelor's degree at VU University Amsterdam must apply through Studielink by 31 May 2014.
2. As an exception to paragraph 1, students who wish to use the services of the International Office for assistance in securing visas and housing need to apply before 1 April 2014.
3. Registration for a Master's programme is only possible until 31 August 2014.
4. Students who have obtained their Bachelor's degree from VU University Amsterdam and wish to register for a Master's programme can apply and register until 31 August 2014.

Article 3.5 English language requirements for Master's programmes taught in English

1. Successful completion of one of the following examinations or an equivalent is regarded as proof that the requirement relating to proficiency in English as the language of instruction has been met:
 - IELTS: 6.5
 - TOEFL paper-based test: 580
 - TOEFL internet-based test: 92-93
 - Cambridge Advanced English: A, B or C.
2. An exemption from the English language proficiency requirement in paragraph 1 will be granted to those who have passed the final Dutch secondary school examination in English at pre-university level (VWO) and those who, no more than two years prior to commencement of the programme:
 - have met the requirements of the VU University Amsterdam English language proficiency test, TOEFL ITP, attaining or surpassing the score stated in paragraph 1, or
 - have completed secondary or higher education in an English-speaking country as specified on the relevant pages of VU University Amsterdam's website, or
 - have an international baccalaureate diploma (English taught).

Article 3.6 Free programme

1. Under certain conditions, students have the option of departing from the standard curriculum as prescribed by the programme and composing their own study programme.
2. The composition of such a programme requires the prior approval of the Examination Board that has the greatest authority over the programme components.
3. The free programme is to be composed by the student from educational units offered by VU University Amsterdam, and is to comprise the same study load, depth and scope of a standard Master's programme.

4. Opbouw van het curriculum

Artikel 4.1 Samenstelling opleiding

- De opleiding heeft een studielast van 120 EC en omvat de volgende onderdelen:
 - Verplichte onderwijseenheden
 - Praktische oefeningen
 - Keuzeruimte
- In afwijking van het bepaalde in lid 1 kunnen studenten onder bepaalde voorwaarden en met goedkeuring vooraf van de examencommissie kiezen voor een vrije master.
- De opleiding heeft een studielast van 120 EC, waarbij één studiepoint gelijk staat aan één EC = 28 uren studie.
- Ieder programma dient door de student ter goedkeuring te worden voorgelegd aan de examencommissie van de opleiding.
- Binnen de masteropleiding DDS zijn er de mastertracks:
 - Computational Medicinal Chemistry and Toxicology
 - Drug Disposition and Safety Assessment
 - Drug Discovery and Target Finding
 - Drug Design and Synthesis
 - Biomarkers and Clinical Analysis
- Met een minor of major researchproject dan wel company training of internship, kan worden gestart als tenminste 18 EC van het masterprogramma zijn behaald.
- De examencommissie kan op advies van de mastercoördinator eisen dat, binnen de in artikel 4.1.6 genoemde 18 EC, een nader genoemd vak is behaald.

Artikel 4.2 Verplichte onderwijseenheden

MSc Drug Discovery & Safety, Communication Variant

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Science and Communication	AM_470587	6	1	h, w	t, o	500
Internship Communication Specialisation	AM_471148	30	1,2,3,4,5,6	-	-	600

MSc Drug Discovery & Safety, Education Variant

Leraar Scheikunde VHO

(60 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Algemene didactiek en Pedagogiek I	O_MLADEPI	6	Sem. 1, Sem. 2	h, w	t, v	500
Algemene Didactiek en Pedagogiek II	O_MLADEPII	3	Sem. 1, Sem. 2	h, w	t, v	500
Praktijk I	O_MLPRAKI	15	Sem. 1, Sem. 2	-	-	500
Praktijk II	O_MLPRAKII	15	Sem. 1, Sem. 2	-	-	500

4. Structure of the curriculum

Article 4.1 Programme composition

- The programme has a study load of 120 credits and consists of the following components:
 - required educational units
 - practical components
 - optional subjects (electives)
- Notwithstanding the provisions of paragraph 1, students may compose their own Master's programme under certain circumstances and with the prior approval of the Examination Board.
- The degree programme has a study load of 120 credits. One credit is equivalent to 28 hours of study.
- Students must submit details of each programme to the programme's Examination Board for approval.
- The Master's programme in DDS offers the following tracks:
 - Computational Medicinal Chemistry and Toxicology
 - Drug Disposition and Safety Assessment
 - Drug Discovery and Target Finding
 - Drug Design and Synthesis
 - Biomarkers and Clinical Analysis
- Students may start on a minor or major research project, go on in-company training or start an internship once 18 credits of the programme have been completed.
- The Examination Board may, in consultation with the Master's Programme Coordinator, require that a specific subject must be included in the 18 credits referred to in Article 4.1.6.

Article 4.2 Required educational units

Chemistry teacher (pre-university education)

(60 credits required)

Period or semester	Teaching method	Examination format	Level
Sem. 1, Sem. 2	h, w	t, v	500
Sem. 1, Sem. 2	h, w	t, v	500
Sem. 1, Sem. 2	-	-	500
Sem. 1, Sem. 2	-	-	500

Professionele ontwikkeling en onderzoek I	O_MLVPOOI	3	Sem. 1, Sem. 2	h, w	o	500
Professionele ontwikkeling en onderzoek II	O_MLVPOOII	6	Sem. 1, Sem. 2	h, w	v, pres	500
Vakdidactiek Scheikunde I	O_MLVDSKI	3	Sem. 1, Sem. 2	w	v	500
Vakdidactiek Scheikunde II	O_MLVDSKII	6	Sem. 1, Sem. 2	w	v	500
Verdieping	O_MLVERD	3	Sem. 1, Sem. 2	h, w	o	500

MSc Drug Discovery & Safety, Research variant DDTF

Compulsory courses

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
High-Throughput Screening	X_435047	6	2	h	t, v, pres	500
Literature thesis and Coll. DDS MC, DDTF	X_432574	12	1,2,3,4,5,6	-	v	600

Compulsory courses research master DDS

(24 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

MSc Drug Discovery & Safety, Research Variant DDSA

Compulsory courses

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Advanced Course on Drug Disp. & Safety Assessment (Mol.Tox.)	X_435681	6	5,6	-	t	500
Literature thesis and Colloquium DDS Molecular Toxicology, DDSA	X_432575	12	1,2,3,4,5,6	-	v, pres	600

Compulsory courses research master DDS

(24 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

MSc Drug Discovery & Safety, Research variant CMCT

Compulsory courses

Educational component	Subject code	Number of credits	Compulsory courses Period or semester	Teaching method	Examination format	Level
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400
Literature thesis and Colloquium	X_432576	12	1,2,3,4,5,6	-	v	600

Compulsory courses research master DDS

(24 EC vereist)

Educational component	Subject code	Number of credits	Compulsory courses Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

Compulsory courses research master DDS

(24 credits required)

MSc Drug Discovery & Safety, Research variant DD&S

Compulsory courses

Educational component	Subject code	Number of credits	Compulsory courses Period or semester	Teaching method	Examination format	Level
Physical-Organic Chemistry	X_435663	6	1	h, pra	v, pres, o	400
Synthetic Approaches in Medicinal Chemistry	X_435685	6	2	w	t	500
Literature thesis and Coll. DDS MC, DD&S	X_432573	12	1,2,3,4,5,6	-	v	600

Compulsory courses research master DDS

(24 EC vereist)

Educational component	Subject code	Number of credits	Compulsory courses Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

Compulsory courses research master DDS

(24 credits required)

MSc Drug Discovery & Safety, Research Variant Biomarkers and Clinical Chemical Analysis

Compulsory courses

Educational component	Subject code	Number of credits	Compulsory courses Period or semester	Teaching method	Examination format	Level
Bio-analysis & Clinical Diagnostics	X_432765	6	1	h, pra	v, pres	400
Omics-procedures in molecular clinical Diagnostics	X_432766	6	5	h, pro	-	400
Literature thesis and Coll. DDS BDA	X_432577	12	1,2,3,4,5,6	-	v, pres	600

Compulsory courses research master DDS
(24 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

Compulsory courses research master DDS
(24 credits required)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

MSc Drug Discovery & Safety, Double Degree

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400

Programma Kopenhagen (60 EC vereist)

Copenhagen Programme (60 credits required)

MSc Drug Discovery & Safety, Social Variant

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Communication, Organization and Management	AM_470572	6	2	h, w	t, v	500
Analysis of Governmental Policy	AM_470571	6	1,2,3,4,5,6	-	-	600
Internship Societal Specialisation	AM_471147	30	1,2,3,4,5,6	-	-	600

Artikel 4.3 Praktische oefening

De praktische oefeningen zijn weergegeven in Artikel 4.2. Verplichte onderwijseenheden met de aanduiding werkvorm praktische oefening (pra).

Artikel 4.4 Keuzeruimte

De student kan, zonder voorafgaande toestemming van de examencommissie, een van de volgende keuzevakken volgen: Zie Bijlage II

De student die een ander vak wil volgen, dan de genoemde onderwijseenheden, dient vooraf schriftelijk toestemming van de examencommissie verkregen te hebben.

Article 4.3 Practical exercise

The practical exercises are listed in Article 4.2. Required educational units marked as practical exercise (pra).

Article 4.4 Optional subjects (electives)

The student does not need the prior approval of the Examination Board to take the following optional subjects: See Appendix II

Students who wish to take a course other than those listed must first obtain prior written permission from the Examination Board.

Artikel 4.5 Volgordelijkheid tentamens

Aan de tentamens en/of praktische oefeningen van de hierna te noemen onderdelen kan niet eerder worden deelgenomen dan nadat het tentamen of de tentamens van de genoemde onderdelen is/zijn behaald:

- Met een minor of major researchproject dan wel company training of internship, kan worden gestart als tenminste 18 EC van het masterprogramma zijn behaald.
- De examencommissie kan op advies van de mastercoördinator eisen dat, binnen de in artikel 4.1.6 genoemde 18 EC, een nader genoemd vak is behaald.

Artikel 4.6 Deelname aan praktische oefening en werkgroepbijeenkomsten

1. Van elke student wordt actieve deelname verwacht aan het examenonderdeel waarvoor hij staat ingeschreven.
2. Naast de algemene eis dat de student actief participeert in het onderwijs, worden de aanvullende eisen per examenonderdeel in de studiegids omschreven. Hier staat ook omschreven voor welke onderdelen van het examenonderdeel een aanwezigheidsplicht geldt.
3. Bij het begin van een examenonderdeel is een beschrijving beschikbaar waarin een beschrijving staat van:
 - De eindtermen van het examenonderdeel;
 - De studierichtlijnen voor het behalen van een positief resultaat;
 - De manier waarop de eindtermen worden getoetst;
 - De tentamenregeling en herkansingsregeling;
 - De begeleiding door de docent(en) binnen en buiten de geroosterde uren;
 - De onderdelen van het examenonderdeel voor welke een aanwezigheidsplicht geldt;
 - De manier waarop de student feedback krijgt op ingeleverde opdrachten, verslagen en presentaties tijdens het examenonderdeel.
4. Als een student door overmacht niet aanwezig kan zijn bij een verplicht onderdeel van het examenonderdeel, dient hij dit zo snel mogelijk schriftelijk te melden bij de examiner en de studieadviseur. De examiner kan, na overleg met de studieadviseur, besluiten om de student een vervangende opdracht op te leggen.
5. Het is niet toegestaan om verplichte onderdelen van een examenonderdeel te missen als er geen sprake is van overmacht.
6. Bij kwalitatief of kwantitatief onvoldoende deelname kan, welke van te voren is vastgelegd en is goedgekeurd door de opleidingsdirecteur, de examiner de student uitsluiten van verdere deelname aan het examenonderdeel of een gedeelte daarvan.

Artikel 4.7 Maximale vrijstelling - n.v.t

Article 4.5 Sequence of exams

A student may not take part in the examinations and/or practical exercises for the components referred to below until he/she has passed the examinations of the components specified:

- Students may start on a minor or major research project, go on in-company training or start an internship once 18 credits of the programme have been completed.
- The Examination Board may, in consultation with the Master's Programme Coordinator, require that a specific subject must be included in the 18 credits referred to in Article 4.1.6.

Article 4.6 Participation in practical exercises and working group meetings

1. Student are expected to participate actively in all degree components for which they are registered.
2. In addition to the general requirement regarding active participation, the study guide details additional requirements for each degree component, as well as component attendance requirements.
3. At the start of each degree component, a specification will be made available which details:
 - The final attainment levels of the degree component;
 - The study guidelines for passing the degree component;
 - The way in which the final attainment levels are assessed;
 - The regulations for examinations and resits;
 - The guidance provided by lecturers during scheduled hours and otherwise;
 - Component attendance requirements;
 - The provision of feedback to the student on assignments and reports submitted, and presentations given during the degree component.
4. If a student is prevented by force majeure from attending a required degree component, then the student must send written notification of his or her absence to the examiner and the study advisor as soon as possible. The examiner may, after consultation with the study advisor, give the student an alternative assignment.
5. Absence from degree components with required attendance is only allowed in the case of force majeure.
6. In the event of inadequate participation, either qualitative or quantitative, the examiner may exclude the student from further participation in the degree component or a part of the degree component. The details of the student's inadequate participation must be recorded in advance and approved by the Director of Studies.

Article 4.7 Maximum exemption – not applicable

Artikel 4.8 Geldigheidsduur resultaten

De geldigheidsduur van tentamens en vrijstellingen voor tentamens is zoals aangegeven in Artikel 4.8 OER deel A.

Artikel 4.9 Graad

Aan de student die het masterexamen met goed gevolg heeft afgelegd, wordt de graad Master of Science verleend. De verleende graad wordt op het getuigschrift vermeld. Ingeval het een gezamenlijke opleiding ('joint degree') betreft, wordt dat vermeld op het getuigschrift.

5. Overgangs- en slotbepalingen

Artikel 5.1 Wijziging en periodieke beoordeling deel B

1. Een wijziging van de onderwijs- en examenregeling van deel B wordt door [*keuze*: UvA: de decaan/ VU: het faculteitsbestuur] vastgesteld na advies van de desbetreffende opleidingscommissie. Het advies wordt in afschrift verzonden aan het bevoegde medezeggenschapsorgaan.
2. Een wijziging van de onderwijs- en examenregeling behoeft de instemming van het bevoegde medezeggenschapsorgaan op de onderdelen die niet de onderwerpen van artikel 7.13, tweede lid onder a t/m g en v, alsmede het vierde lid WHW betreffen en de toelatingseisen tot de masteropleiding.
3. Een wijziging van de onderwijs- en examenregeling kan slechts betrekking hebben op een lopend studiejaar, indien de belangen van de studenten daardoor niet aantoonbaar worden geschaad.

Artikel 5.2 Overgangsbepalingen

In afwijking van de vigerende onderwijs- en examenregeling gelden voor de studenten die met de opleiding zijn begonnen onder een eerdere onderwijs- en examenregeling de volgende overgangsbepalingen:

Artikel 5.3 Bekendmaking

1. Het faculteitsbestuur draagt zorg voor een passende bekendmaking van deze regeling, alsmede van elke wijziging daarvan.
2. De onderwijs- en examenregeling wordt geplaatst op de website van de faculteit en wordt geacht te zijn opgenomen in de studiegids.

Artikel 5.4 Inwerkingtreding

Deze regeling treedt in werking met ingang van 1 september 2014.

Advies opleidingscommissies, 22 mei 2014, d.d.

Instemming bevoegd medezeggenschapsorgaan, d.d. 13 juni 2014 (FSr) en 26 juni (ODC)

Vastgesteld door het bestuur van de Faculteit der Exacte

Article 4.8 Period of validity for results

The period of validity for examinations and exemptions for exams is in accordance with Article 4.8 of Part A of the Academic and Examination Regulations.

Article 4.9 Degree

Students who fulfil all the requirements of the final Master's degree assessment will be awarded the degree of Master of Science. Details of the degree awarded will be recorded on the degree certificate. If the student is studying for a joint degree, then this will be mentioned on the degree certificate.

5. Transitional and final provisions

Article 5.1 Amendments and periodic assessment of Part B

1. An amendment to Part B of the Academic and Examination Regulations may be [*select*: UvA: adopted by the Dean / VU: adopted by the Faculty Board] following consultation with the relevant programme committee. A copy of this recommendation will be sent to the faculty's consultation body.
2. An amendment to the Academic and Examination Regulations requires the endorsement of the faculty's competent consultation body for those sections which do not relate to the subjects of Article 7.13 paragraphs 2 a to g and v, and paragraph 4 of the Act and the admission requirements for the Master's programme.
3. An amendment to the Academic and Examination Regulations may only relate to an academic year already in progress if the interests of the students are not demonstrably harmed.

Article 5.2 Transitional provisions

Notwithstanding the current Academic and Examination Regulations, the following transitional provisions apply to students who started the programme when an earlier version of the Academic and Examination Regulations was in force:

Article 5.3 Publication

1. The Faculty Board will ensure that these regulations are properly published, and that notice is given of each amendment.
2. The Academic and Examination Regulations will be published on the faculty's website and shall be included in the study guide.

Article 5.4 Entry into force

These regulations enter into force on 1 September 2014.

Programme Committee Recommendation, dated 22 May 2014,

Consent granted by the competent consultation bodies FSr (13 June 2014) and ODC (26 June 2014).

Adopted by the Board of the Faculty of Sciences on 19

Bijlage I

Overzicht artikelen waarvan in de WHW is bepaald dat deze in de OER moeten worden opgenomen (omkaderde artikelen):

Deel A

art. 1.17.13 lid 1 WHW
art. 2.17.13 lid 2 sub w
art. 3.27.13 lid 2 sub e
art. 4.27.13 lid 2 sub h en l
art. 4.37.13 lid 2 sub n
art. 4.47.13 lid 2 sub o
art. 4.57.13 lid 2 sub j, h
art. 4.77.13 lid 2 sub r
art. 4.87.13 lid 2 sub k
art. 4.97.13 lid 2 sub p
art. 4.107.13 lid 2 sub q
art. 4.117.13 lid 2 sub a
art. 5.17.13 lid 2 sub u
art. 5.27.13 lid 2 sub m

Deel B

art. 1.27.13 lid 2 sub i
art. 2.17.13 lid 1 sub b, c
art. 2.27.13 lid 2 sub c
art. 3.17.25 lid 4
art. 4.17.13 lid 2 sub a
art. 4.27.13 lid 2 sub e, h, j, l,
art. 4.37.13 lid 2 sub t
art. 4.47.13 lid 2 sub e, h, j, l,
art. 4.57.13 lid 2 sub s
art. 4.67.13 lid 2 sub d
art. 4.87.13 lid 2 sub k

Appendix I

Summary of Articles which must be included in the Academic and Examination Regulations in accordance with the Act (articles in boxes):

Part A

Art. 1.17.13 paragraph 1 of the Act
Art. 2.17.13 paragraph 2 (w)
Art. 3.27.13 paragraph 2 (e)
Art. 4.27.13 paragraph 2 (h, l)
Art. 4.37.13 paragraph 2 (n)
Art. 4.47.13 paragraph 2 (o)
Art. 4.57.13 paragraph 2 (j, h)
Art. 4.77.13 paragraph 2 (r)
Art. 4.87.13 paragraph 2 (k)
Art. 4.97.13 paragraph 2 (p)
Art. 4.107.13 paragraph 2 (q)
Art. 4.117.13 paragraph 2 (a)
Art. 5.17.13 paragraph 2 (u)
Art. 5.27.13 paragraph 2 (m)

Part B

Art. 1.27.13 paragraph 2 (i)
Art. 2.17.13 paragraph 1 (b, c)
Art. 2.27.13 paragraph 2 (c)
Art. 3.17.25 paragraph 4
Art. 4.17.13 paragraph 2 (a)
Art. 4.27.13 paragraph 2 (e, h, j, l)
Art. 4.37.13 paragraph 2 (t)
Art. 4.47.13 paragraph 2 (e, h, j, l)
Art. 4.57.13 paragraph 2 (s)
Art. 4.67.13 paragraph 2 (d)
Art. 4.87.13 paragraph 2 (k)

Bijlage II**Artikel 4.4 Keuzeruimte**

De student kan, zonder voorafgaande toestemming van de examencommissie, een van de volgende keuzevakken volgen

MSc Drug Discovery & Safety

Deficientievak (0 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Principles of Pharmaceutical Sciences / Pharmacochemistry	X_435675	6	1	h, pra	t	400

MSc Drug Discovery & Safety, Communication Variant

Specialisation Courses (30 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Physical-Organic Chemistry	X_435663	6	1	h, pra	v, pres, o	400
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Mass Spectrometry	X_435604	6	2	-	t	-
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Synthetic Approaches in Medicinal Chemistry	X_435685	6	2	w	t	500
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400

Literature and Colloquium

(compulsory choose 1 of 5) (6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Colloquium and Literature Thesis	X_432571	6	1,2,3,4,5,6	-	-	600
Literature thesis and Coll. DDS BDA	X_432570	6	1,2,3,4,5,6	-	v, pres	600
Literature thesis and Coll. DDS MC, DD&S	X_432623	6	1,2,3,4,5,6	-	v	600
Literature thesis and Coll. DDS MC, DDTF	X_432624	6	1,2,3,4,5,6	-	-	600
Literature thesis and Colloquium DDS Molecular Toxicology, DDSA (C,E,M)	X_432572	6	1,2,3,4,5,6	-	v, pres	600

DDS Research project (choose 1 of 5)

(24 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project	X_432727	24	1,2,3,4,5,6	pro	-	600

Appendix II**Article 4.4 Optional subjects (electives)**

The student does not need the prior approval of the Examination Board to take the following optional subjects:

Deficiency subject (0 credits required)

Period or semester	Teaching method	Examination format	Level
1	h, pra	t	400

Specialisation courses (30 credits required)

Period or semester	Teaching method	Examination format	Level
1	h	t, v	400
1	h, w	t, pres, o	400
1	h, pra	v, pres, o	400
2	h, w	v, pres, o	400
2	h	t	500
2	-	t	-
2	h	t, pres, o	600
2	w	t	500
3	h, w	t, o	400
4	h, pra	t, v	400
5,6	h	v, pres	400

Literature and Colloquium

(compulsory, choose 1 of 5) (6 credits required)

Period or semester	Teaching method	Examination format	Level
1,2,3,4,5,6	-	-	600
1,2,3,4,5,6	-	v, pres	600
1,2,3,4,5,6	-	v	600
1,2,3,4,5,6	-	-	600
1,2,3,4,5,6	-	v, pres	600

DDS Research project (choose 1 of 5)

(24 credits required)

Period or semester	Teaching method	Examination format	Level
1,2,3,4,5,6	pro	-	600

DDS Biomolecular Drug Analysis Major Research Project DDS Medicinal Chemistry, DD&S	X_432728	24	1,2,3,4,5,6	pro	v, pres, o	600
Major Research Project DDS Medicinal Chemistry, DDTF	X_432729	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Molecular Toxicology, CMCT	X_432730	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Molecular Toxicology, DDSA	X_432731	24	1,2,3,4,5,6	pro	v, pres	600

Aangeraden keuzevakken (18 EC keuzeruimte)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Communication, Organization and Management	AM_470572	6	2	h, w	t, v	500
Science in Dialogue	AM_1002	6	2	h, w	t, v, o	500
Science Journalism	AM_471014	6	2	h, w	t, o	500
Science Museology	AM_470590	6	3	h, w	t, pres, o	500

MSc Drug Discovery & Safety, Education Variant

Specialisation Courses i.o. met mastercoordinator (30 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Physical-Organic Chemistry	X_435663	6	1	h, pra	v, pres, o	400
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Mass Spectrometry	X_435604	6	2	-	t	-
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Synthetic Approaches in Medicinal Chemistry	X_435685	6	2	w	t	500
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational Design and Synthesis of Drugs	X_432734	6	4	h, pra	t, v	400
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400

Literature and Colloquium (compulsory choose 1 of 5) (6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Colloquium and Literature Thesis	X_432571	6	1,2,3,4,5,6	-	-	600
Literature thesis and Coll. DDS BDA	X_432570	6	1,2,3,4,5,6	-	v, pres	600

Specialization Courses in consultation with Master's Coordinator (30 credits required)

Literature and Colloquium (required, choose 1 of 5) (6 credits required)

Literature thesis and Coll. DDS MC, DD&S	X_432623	6	1,2,3,4,5,6	-	v	600
Literature thesis and Coll. DDS MC, DDTF	X_432624	6	1,2,3,4,5,6	-	-	600
Literature thesis and Colloquium DDS Molecular Toxicology, DDSA (C,E,M)	X_432572	6	1,2,3,4,5,6	-	v, pres	600

DDS Research project (choose 1 of 5)
(24 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project DDS Biomolecular Drug Analysis	X_432727	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Medicinal Chemistry, DD&S	X_432728	24	1,2,3,4,5,6	pro	v, pres, o	600
Major Research Project DDS Medicinal Chemistry, DDTF	X_432729	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Molecular Toxicology, CMCT	X_432730	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Molecular Toxicology, DDSA	X_432731	24	1,2,3,4,5,6	pro	v, pres	600

DDS Research Project (choose 1 of 5)
(24 credits required)

MSc Drug Discovery & Safety, Research variant DDTF

Ethics and Academic Skills (choose 6 EC)
(6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Managing Science and Technology in Society	AM_470586	6	1	h, w	t, v, pro	600
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Science and Communication Business and Innovation in Life Science	AM_470587	6	1	h, w	t, o	500
Business Management in Health and Life Sciences	X_432539	3	1,3	h	t, v, pres	400
Communication, Organization and Management	AM_470584	6	2	h	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470572	6	2	h, w	t, v	500
Science in Dialogue	AM_470575	6	2	h, w	t, o	500
Science Journalism	AM_1002	6	2	h, w	t, v, o	500
Tutoring Students	AM_471014	6	2	h, w	t, o	500
Scientific Writing in English	X_432625	3	2	h	v	400
Clinical development and clinical trials	X_400592	3	2,6	h	o	400
Ethics in Life Sciences	AM_470585	6	3	h, w	t	500
Ethics and Academic Skills	AM_470707	3	3	h, w	t, pres	400
Ethics and Academic Skills	X_432517	3	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432725	1	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432726	2	1,2,3,4,5,6	-	-	400
Ethics and Academic Skills	X_437556	6	1,2,3,4,5,6	-	-	400
Ethics in Public Health	AM_470805	3	1,2,3,4,5,6	h, w	v	-

Teaching Assistant	X_432741	3	1,2,3,4,5,6	-	-	400
Teaching Assistant	X_432742	6	1,2,3,4,5,6	-	-	400

Research project (choose 42, 48, 54 or 60 EC)
(42 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project DDS MC, DDTF	X_432547	42	1,2,3,4,5,6	pro	-	600
Major Research Project DDS MC, DDTF	X_432550	48	1,2,3,4,5,6	pro	-	600
Major Research Project DDS MC, DDTF	X_432551	54	1,2,3,4,5,6	pro	-	600
Major Research Project DDS MC, DDTF	X_432552	60	1,2,3,4,5,6	pro	-	600

Research Project (choose 42, 48, 54 or 60 credits)
(42 credits required)

Aangeraden keuzevakken (24 EC keuzeruimte)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Supramolecular Chemistry and Nanomaterials	X_435653	6	1	-	-	400
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Mass Spectrometry	X_435604	6	2	-	t	-
Protein Analysis	X_435045	6	5	h, pra	t	500
Advanced Course on Drug Disp. & Safety Assessment (Mol.Tox.)	X_435681	6	5,6	-	t	500
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400
Applied Theoretical Chemistry	X_432501	12	1,2,3,4,5,6	h, pro	v	500
Applied Theoretical Chemistry	X_435612	6	1,2,3,4,5,6	h, pro	v	500
Company Training DDS-DDTF	X_432621	18	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS-DDTF	X_432747	24	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS-DDTF	X_432752	30	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS-DDTF	X_432836	36	1,2,3,4,5,6	-	-	-
Internship abroad DDS Drug Disc. & Target Find.	X_432678	18	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Drug Disc. & Target Find.	X_432757	24	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Drug Disc. & Target Find.	X_432762	30	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Drug Disc. & Target Find.	X_432840	36	1,2,3,4,5,6	-	-	-
Minor Research Project Biomol. Drug Analysis	X_432689	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Biomol. Drug Analysis	X_432704	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS BDA	X_432658	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS	X_432692	18	1,2,3,4,5,6	pro	v, pres, o	500

Medicinal Chemistry, DD&S Minor Research Project DDS						
Medicinal Chemistry, DD&S Minor Research Project DDS	X_432693	24	1,2,3,4,5,6	pro	v, pres, o	500
Medicinal Chemistry, DD&S Minor Research Project DDS	X_432705	30	1,2,3,4,5,6	pro	v, pres, o	500
Molecular Toxicology, CMCT Minor Research Project DDS	X_432632	24	1,2,3,4,5,6	pro	-	500
Molecular Toxicology, CMCT Minor Research Project DDS	X_432707	30	1,2,3,4,5,6	pro	-	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432591	24	1,2,3,4,5,6	pro	v, pres	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432592	30	1,2,3,4,5,6	pro	v, pres	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432620	18	1,2,3,4,5,6	pro	v, pres	500
MT, CMCT Minor Research Project	X_432507	18	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find. Minor Research Project	X_432696	18	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find. Minor Research Project	X_432706	30	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target.Find.	X_432635	24	1,2,3,4,5,6	pro	-	500

MSc Drug Discovery & Safety, Research Variant DDSA

Ethics and Academic Skills (choose 6 EC)

(6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Managing Science and Technology in Society	AM_470586	6	1	h, w	t, v, pro	600
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Science and Communication Business and Innovation in Life Science	AM_470587	6	1	h, w	t, o	500
Business Management in Health and Life Sciences	X_432539	3	1,3	h	t, v, pres	400
Communication, Organization and Management	AM_470584	6	2	h	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470572	6	2	h, w	t, v	500
Science in Dialogue	AM_470575	6	2	h, w	t, o	500
Science Journalism	AM_1002	6	2	h, w	t, v, o	500
Tutoring Students	AM_471014	6	2	h, w	t, o	500
Scientific Writing in English	X_432625	3	2	h	v	400
Clinical development and clinical trials	X_400592	3	2,6	h	o	400
Ethics in Life Sciences	AM_470585	6	3	h, w	t	500
Ethics and Academic Skills	AM_470707	3	3	h, w	t, pres	400
Ethics and Academic Skills	X_432517	3	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432725	1	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432726	2	1,2,3,4,5,6	-	-	400
Ethics and Academic Skills	X_437556	6	1,2,3,4,5,6	-	-	400
Ethics in Public Health	AM_470805	3	1,2,3,4,5,6	h, w	v	-
Teaching Assistant	X_432741	3	1,2,3,4,5,6	-	-	400

Teaching Assistant	X_432742	6	1,2,3,4,5,6	-	-	400
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Research project (choose 42, 48, 54 or 60 EC)
(42 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project DDS Molecular Toxicology, DDSA	X_432559	42	1,2,3,4,5,6	pro	v, pres	600
Major Research Project DDS Molecular Toxicology, DDSA	X_432561	48	1,2,3,4,5,6	pro	v, pres	600
Major Research Project DDS Molecular Toxicology, DDSA	X_432562	54	1,2,3,4,5,6	pro	v, pres	600
Major Research Project DDS Molecular Toxicology, DDSA	X_432563	60	1,2,3,4,5,6	pro	v, pres	600

Research Project (choose 42, 48, 54 or 60 credits)
(42 credits required)

Aangeraden keuzevakken (24 EC keuzeruimte)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Supramolecular Chemistry and Nanomaterials	X_435653	6	1	-	-	400
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400
Applied Theoretical Chemistry	X_432501	12	1,2,3,4,5,6	h, pro	v	500
Applied Theoretical Chemistry	X_435612	6	1,2,3,4,5,6	h, pro	v	500
Company Training DDS Drug, Disp. and Saf. Assessm.	X_432672	18	1,2,3,4,5,6	pro	v, pres	500
Company Training DDS Drug, Disp. and Saf. Assessm.	X_432746	24	1,2,3,4,5,6	pro	v, pres	500
Company Training DDS Drug, Disp. and Saf. Assessm.	X_432751	30	1,2,3,4,5,6	pro	v, pres	500
Company Training DDS Drug, Disp. and Saf. Assessm.	X_432834	36	1,2,3,4,5,6	-	-	-
Internship abroad DDS Drug, Disp. and Saf. Assessm.	X_432677	18	1,2,3,4,5,6	pro	v, pres	500
Internship abroad DDS Drug, Disp. and Saf. Assessm.	X_432756	24	1,2,3,4,5,6	pro	v, pres	500
Internship abroad DDS Drug, Disp. and Saf. Assessm.	X_432761	30	1,2,3,4,5,6	pro	v, pres	500
Internship abroad DDS Drug, Disp. and Saf. Assessm.	X_432841	36	1,2,3,4,5,6	-	-	-
Minor Research Project	X_432689	18	1,2,3,4,5,6	pro	-	500

Biomol. Drug Analysis

Minor Research Project

Biomol. Drug Analysis Minor Research Project DDS	X_432704	30	1,2,3,4,5,6	pro	-	500
BDA Minor Research Project DDS	X_432658	24	1,2,3,4,5,6	pro	-	500
Medicinal Chemistry, DD&S Minor Research Project DDS	X_432692	18	1,2,3,4,5,6	pro	v, pres, o	500
Medicinal Chemistry, DD&S Minor Research Project DDS	X_432693	24	1,2,3,4,5,6	pro	v, pres, o	500
Medicinal Chemistry, DD&S Minor Research Project DDS	X_432705	30	1,2,3,4,5,6	pro	v, pres, o	500
Molecular Toxicology, CMCT Minor Research Project DDS	X_432632	24	1,2,3,4,5,6	pro	-	500
Molecular Toxicology, CMCT Minor Research Project DDS	X_432707	30	1,2,3,4,5,6	pro	-	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432591	24	1,2,3,4,5,6	pro	v, pres	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432592	30	1,2,3,4,5,6	pro	v, pres	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432620	18	1,2,3,4,5,6	pro	v, pres	500
MT, CMCT Minor Research Project	X_432507	18	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find. Minor Research Project	X_432696	18	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find. Minor Research Project	X_432706	30	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find.	X_432635	24	1,2,3,4,5,6	pro	-	500

MSc Drug Discovery & Safety, Research variant CMCT

Ethics and Academic Skills (choose 6 EC)

(6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Managing Science and Technology in Society	AM_470586	6	1	h, w	t, v, pro	600
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Science and Communication	AM_470587	6	1	h, w	t, o	500
Business and Innovation in Life Science	X_432539	3	1,3	h	t, v, pres	400
Business Management in Health and Life Sciences	AM_470584	6	2	h	t, v	500
Communication, Organization and Management	AM_470572	6	2	h, w	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470575	6	2	h, w	t, o	500
Science in Dialogue	AM_1002	6	2	h, w	t, v, o	500
Science Journalism	AM_471014	6	2	h, w	t, o	500
Tutoring Students	X_432625	3	2	h	v	400
Scientific Writing in English	X_400592	3	2,6	h	o	400
Clinical development and clinical trials	AM_470585	6	3	h, w	t	500
Ethics in Life Sciences	AM_470707	3	3	h, w	t, pres	400
Ethics and Academic Skills	X_432517	3	1,2,3,4,5,6	-	-	400

Ethics and Academic skills	X_432725	1	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432726	2	1,2,3,4,5,6	-	-	400
Ethics and Academic Skills	X_437556	6	1,2,3,4,5,6	-	-	400
Ethics in Public Health	AM_470805	3	1,2,3,4,5,6	h, w	v	-
Teaching Assistant	X_432741	3	1,2,3,4,5,6	-	-	400
Teaching Assistant	X_432742	6	1,2,3,4,5,6	-	-	400

Research project (choose 42, 48, 54 or 60 EC)
(42 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project						
DDS MT, CMCT	X_432553	42	1,2,3,4,5,6	pro	-	600
Major Research Project						
DDS MT, CMCT	X_432556	48	1,2,3,4,5,6	pro	-	600
Major Research Project						
DDS MT, CMCT	X_432557	54	1,2,3,4,5,6	pro	-	600
Major Research Project						
DDS MT, CMCT	X_432558	60	1,2,3,4,5,6	pro	-	600

Research Project (choose 42, 48, 54 or 60 credits)
(42 credits required)

Aangeraden keuzevakken (24 EC keuzeruimte)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Supramolecular Chemistry and Nanomaterials	X_435653	6	1	-	-	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Applied Theoretical Chemistry	X_432501	12	1,2,3,4,5,6	h, pro	v	500
Applied Theoretical Chemistry	X_435612	6	1,2,3,4,5,6	h, pro	v	500
Company Training DDS-CMCT	X_432619	18	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS-CMCT	X_432744	24	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS-CMCT	X_432749	30	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS-CMCT	X_432835	36	1,2,3,4,5,6	-	-	-
Density Functional Theory for Chemists	X_435111	6	1,2,3,4,5,6	-	t	500
Density Functional Theory for Chemists	X_435112	12	1,2,3,4,5,6	-	t	500
Internship abroad DDS Comp. Med. Chem. & Tox.	X_432675	18	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Comp. Med. Chem. & Tox.	X_432754	24	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Comp. Med. Chem. & Tox.	X_432759	30	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Comp. Med. Chem. & Tox.	X_432838	36	1,2,3,4,5,6	-	-	-
Minor Research Project Biomol. Drug Analysis	X_432689	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Biomol. Drug Analysis	X_432704	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS BDA	X_432658	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432692	18	1,2,3,4,5,6	pro	v, pres, o	500

Minor Research Project DDS Medicinal Chemistry, DD&S	X_432693	24	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432705	30	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Molecular Toxicology, CMCT	X_432632	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Molecular Toxicology, CMCT	X_432707	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Molecular Toxicology, DDSA	X_432591	24	1,2,3,4,5,6	pro	v, pres	500
Minor Research Project DDS Molecular Toxicology, DDSA	X_432592	30	1,2,3,4,5,6	pro	v, pres	500
Minor Research Project DDS Molecular Toxicology, DDSA	X_432620	18	1,2,3,4,5,6	pro	v, pres	500
Minor Research Project DDS MT, CMCT	X_432507	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Med. Chem., Drug Disc. & Target Find.	X_432696	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Med. Chem., Drug Disc. & Target Find.	X_432706	30	1,2,3,4,5,6	pro	-	500
Minor Research Project Med. Chem., Drug Disc. & Target.Find.	X_432635	24	1,2,3,4,5,6	pro	-	500

MSc Drug Discovery & Safety, Research variant DD&S
Ethics and Academic Skills (choose 6 EC)
(6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Managing Science and Technology in Society	AM_470586	6	1	h, w	t, v, pro	600
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Science and Communication Business and Innovation in Life Science	AM_470587	6	1	h, w	t, o	500
Business Management in Health and Life Sciences	X_432539	3	1,3	h	t, v, pres	400
Communication, Organization and Management	AM_470584	6	2	h	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470572	6	2	h, w	t, v	500
Science in Dialogue	AM_470575	6	2	h, w	t, o	500
Science Journalism	AM_1002	6	2	h, w	t, v, o	500
Tutoring Students	AM_471014	6	2	h, w	t, o	500
Scientific Writing in English	X_432625	3	2	h	v	400
Clinical development and clinical trials	X_400592	3	2,6	h	o	400
Ethics in Life Sciences	AM_470585	6	3	h, w	t	500
Ethics and Academic Skills	AM_470707	3	3	h, w	t, pres	400
Ethics and Academic Skills	X_432517	3	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432725	1	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432726	2	1,2,3,4,5,6	-	-	400
Ethics and Academic Skills	X_437556	6	1,2,3,4,5,6	-	-	400
Ethics in Public Health	AM_470805	3	1,2,3,4,5,6	h, w	v	-
Teaching Assistant	X_432741	3	1,2,3,4,5,6	-	-	400
Teaching Assistant	X_432742	6	1,2,3,4,5,6	-	-	400

Research project (choose 42, 48, 54 or 60 EC)
(42 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project DDS MC, DD&S	X_432509	42	1,2,3,4,5,6	pro	v, pres, o	600
Major Research Project DDS MC, DD&S	X_432545	54	1,2,3,4,5,6	pro	v, pres, o	600
Major Research Project DDS MC, DD&S	X_432546	60	1,2,3,4,5,6	pro	v, pres, o	600
Major Research Project DDS Medicinal Chemistry, DD&S	X_432544	48	1,2,3,4,5,6	pro	v, pres, o	600

Research Project (choose 42, 48, 54 or 60 credits)
(42 credits required)

Aangeraden keuzevakken (24 EC keuzeruimte)

Recommended electives (24 credits)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400
Company Training DDS Drug Design & Synth.	X_432671	18	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS Drug Design & Synth.	X_432745	24	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS Drug Design & Synth.	X_432750	30	1,2,3,4,5,6	-	v, pres, o	500
Company Training DDS Drug Design & Synth.	X_432833	36	1,2,3,4,5,6	-	v, pres, o	-
Internship abroad DDS Drug Design & Synth.	X_432676	18	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Drug Design & Synth.	X_432755	24	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Drug Design & Synth.	X_432760	30	1,2,3,4,5,6	-	v, pres, o	500
Internship abroad DDS Drug Design & Synth.	X_432839	36	1,2,3,4,5,6	-	v, pres, o	-
Minor Research Project Biomol. Drug Analysis	X_432689	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Biomol. Drug Analysis	X_432704	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS BDA	X_432658	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432692	18	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432693	24	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432705	30	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Molecular Toxicology, CMCT	X_432632	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Molecular Toxicology, CMCT	X_432707	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS	X_432591	24	1,2,3,4,5,6	pro	v, pres	500

Molecular Toxicology, DDSA Minor Research Project DDS						
Molecular Toxicology, DDSA Minor Research Project DDS	X_432592	30	1,2,3,4,5,6	pro	v, pres	500
Molecular Toxicology, DDSA Minor Research Project DDS	X_432620	18	1,2,3,4,5,6	pro	v, pres	500
MT, CMCT Minor Research Project	X_432507	18	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find. Minor Research Project	X_432696	18	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find. Minor Research Project	X_432706	30	1,2,3,4,5,6	pro	-	500
Med. Chem., Drug Disc. & Target Find.	X_432635	24	1,2,3,4,5,6	pro	-	500

MSc Drug Discovery & Safety, Research Variant Biomarkers and Clinical Chemical Analysis

Ethics and Academic Skills (choose 6 EC)

(6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Managing Science and Technology in Society	AM_470586	6	1	h, w	t, v, pro	600
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400
Science and Communication Business and Innovation in Life Science	AM_470587	6	1	h, w	t, o	500
Business Management in Health and Life Sciences	X_432539	3	1,3	h	t, v, pres	400
Communication, Organization and Management	AM_470584	6	2	h	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470572	6	2	h, w	t, v	500
Science in Dialogue	AM_470575	6	2	h, w	t, o	500
Science Journalism	AM_1002	6	2	h, w	t, v, o	500
Tutoring Students	AM_471014	6	2	h, w	t, o	500
Scientific Writing in English	X_432625	3	2	h	v	400
Clinical development and clinical trials	X_400592	3	2,6	h	o	400
Ethics in Life Sciences	AM_470585	6	3	h, w	t	500
Ethics and Academic Skills	AM_470707	3	3	h, w	t, pres	400
Ethics and Academic skills	X_432517	3	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432725	1	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432726	2	1,2,3,4,5,6	-	-	400
Ethics and Academic Skills	X_437556	6	1,2,3,4,5,6	-	-	400
Ethics in Public Health	AM_470805	3	1,2,3,4,5,6	h, w	v	-
Teaching Assistant	X_432741	3	1,2,3,4,5,6	-	-	400
Teaching Assistant	X_432742	6	1,2,3,4,5,6	-	-	400

**Keuze één van drie afhankelijk van Major Project
(in overleg met mastercoordinator)**

(6 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
High-Throughput Screening	X_435047	6	2	h	t, v, pres	500
Mass Spectrometry	X_435604	6	2	-	t	-
Protein Analysis	X_435045	6	5	h, pra	t	500

**Choose one of three, depending on Master's
project (in consultation with Master's Coordinator)**

(6 credits required)

**Compulsory Choice Research project (Major)
including report (42 EC vereist)**

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project DDS BDA	X_432564	42	1,2,3,4,5,6	pro	-	600
Major Research Project DDS BDA	X_432567	48	1,2,3,4,5,6	pro	-	600
Major Research Project DDS BDA	X_432568	54	1,2,3,4,5,6	pro	-	600
Major Research Project DDS BDA	X_432569	60	1,2,3,4,5,6	pro	-	600

**Required Choice of Research Project (Major)
including report (42 credits required)**
Aangeraden keuzevakken (18 EC keuzeruimte)
Recommended electives (18 credits)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400
Company Training DDS Biomol. Drug Analysis	X_432670	18	1,2,3,4,5,6	-	-	500
Company Training DDS Biomol. Drug Analysis	X_432743	24	1,2,3,4,5,6	-	-	500
Company Training DDS Biomol. Drug Analysis	X_432748	30	1,2,3,4,5,6	-	-	500
Company Training DDS Biomol. Drug Analysis	X_432832	36	1,2,3,4,5,6	-	-	-
Internship abroad DDS Biomol. Drug Analysis	X_432674	18	1,2,3,4,5,6	-	-	500
Internship abroad DDS Biomol. Drug Analysis	X_432753	24	1,2,3,4,5,6	-	-	500
Internship abroad DDS Biomol. Drug Analysis	X_432758	30	1,2,3,4,5,6	-	-	500
Internship abroad DDS Biomol. Drug Analysis	X_432837	36	1,2,3,4,5,6	-	-	-
Minor Research Project Biomol. Drug Analysis	X_432689	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Biomol. Drug Analysis	X_432704	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS BDA	X_432658	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432692	18	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432693	24	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Medicinal Chemistry, DD&S	X_432705	30	1,2,3,4,5,6	pro	v, pres, o	500
Minor Research Project DDS Molecular Toxicology, CMCT	X_432632	24	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Molecular Toxicology, CMCT	X_432707	30	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS Molecular Toxicology, DDSA	X_432591	24	1,2,3,4,5,6	pro	v, pres	500

Minor Research Project DDS Molecular Toxicology, DDSA	X_432592	30	1,2,3,4,5,6	pro	v, pres	500
Minor Research Project DDS Molecular Toxicology, DDSA	X_432620	18	1,2,3,4,5,6	pro	v, pres	500
Minor Research Project DDS MT, CMCT	X_432507	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Med. Chem., Drug Disc. & Target Find.	X_432696	18	1,2,3,4,5,6	pro	-	500
Minor Research Project Med. Chem., Drug Disc. & Target Find.	X_432706	30	1,2,3,4,5,6	pro	-	500
Minor Research Project Med. Chem., Drug Disc. & Target Find.	X_432635	24	1,2,3,4,5,6	pro	-	500

**MSc Drug Discovery & Safety, Double Degree
Keuzevakken (18 EC vereist)**

Elective courses (18 credits required)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Bio-analysis & Clinical Diagnostics	X_432765	6	1	h, pra	v, pres	400
Physical-Organic Chemistry Computer-Aided Drug Design and Virtual Screening	X_435663	6	1	h, pra	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432673	6	2	h, w	v, pres, o	400
Signal Transduction in Health and Disease	X_432536	6	2	h	t	500
Synthetic Approaches in Medicinal Chemistry	X_432535	6	2	h	t, pres, o	600
Omics-procedures in molecular clinical Diagnostics	X_435685	6	2	w	t	500
Advanced Course on Drug Disp. & Safety Assessment (Mol.Tox.)	X_432766	6	5	h, pro	-	400
Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_435681	6	5,6	-	t	500
Minor Research Project Biomol. Drug Analysis	X_432664	6	5,6	h	v, pres	400
Minor Research Project DDS Molecular Toxicology, DDSA	X_432689	18	1,2,3,4,5,6	pro	-	500
Minor Research Project DDS MT, CMCT	X_432620	18	1,2,3,4,5,6	pro	v, pres	500
Minor Research Project Med. Chem., Drug Disc. & Target Find.	X_432507	18	1,2,3,4,5,6	pro	-	500
	X_432696	18	1,2,3,4,5,6	pro	-	500

**Verplichte Keuze Ethics & Academic Skills
(6 EC vereist)**

**Required choice: Ethics & Academic Skills
(6 credits required)**

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Managing Science and Technology in Society	AM_470586	6	1	h, w	t, v, pro	600
Qualitative and Quantitative Research Methods	AM_470582	6	1	h, w	t, o	400

Science and Communication Business and Innovation in Life Science	AM_470587	6	1	h, w	t, o	500
Business Management in Health and Life Sciences	X_432539	3	1,3	h	t, v, pres	400
Communication, Organization and Management	AM_470584	6	2	h	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470572	6	2	h, w	t, v	500
Science in Dialogue	AM_470575	6	2	h, w	t, o	500
Science Journalism	AM_1002	6	2	h, w	t, v, o	500
Tutoring Students	AM_471014	6	2	h, w	t, o	500
Scientific Writing in English	X_432625	3	2	h	v	400
Clinical development and clinical trials	X_400592	3	2,6	h	o	400
Ethics in Life Sciences	AM_470585	6	3	h, w	t	500
Ethics and Academic Skills	AM_470707	3	3	h, w	t, pres	400
Ethics and Academic Skills	X_432517	3	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432725	1	1,2,3,4,5,6	-	-	400
Ethics and Academic skills	X_432726	2	1,2,3,4,5,6	-	-	400
Ethics and Academic Skills	X_437556	6	1,2,3,4,5,6	-	-	400
Ethics in Public Health	AM_470805	3	1,2,3,4,5,6	h, w	v	-
Teaching Assistant	X_432741	3	1,2,3,4,5,6	-	-	400
Teaching Assistant	X_432742	6	1,2,3,4,5,6	-	-	400

Keuze Thesis 1 van 6 (12 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Literature thesis and Coll. DDS BDA	X_432577	12	1,2,3,4,5,6	-	v, pres	600
Literature thesis and Coll. DDS MC, DD&S	X_432573	12	1,2,3,4,5,6	-	v	600
Literature thesis and Coll. DDS MC, DDTF	X_432574	12	1,2,3,4,5,6	-	v	600
Literature thesis and Colloquium	X_432576	12	1,2,3,4,5,6	-	v	600
Literature thesis and Colloquium DDS Molecular Toxicology, DDSA	X_432575	12	1,2,3,4,5,6	-	v, pres	600

MSc Drug Discovery & Safety, Social Variant

Specialisation Courses (30 EC vereist)

Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
ADMET	X_432721	6	1	h	t, v	400
Chemical Biology	X_432538	6	1	h, w	t, pres, o	400
Physical-Organic Chemistry	X_435663	6	1	h, pra	v, pres, o	400
Computer-Aided Drug Design and Virtual Screening	X_432673	6	2	h, w	v, pres, o	400
Drug-induced Stress and Cellular Responses	X_432536	6	2	h	t	500
Mass Spectrometry	X_435604	6	2	-	t	-
Signal Transduction in Health and Disease	X_432535	6	2	h	t, pres, o	600
Synthetic Approaches in Medicinal Chemistry	X_435685	6	2	w	t	500
Drug Action	X_432724	6	3	h, w	t, o	400
Project Computational	X_432734	6	4	h, pra	t, v	400

Design and Synthesis of Drugs Biomolecular Simulation in Medicinal Chemistry and Toxicology	X_432664	6	5,6	h	v, pres	400
Literature and Colloquium (compulsory choose 1 of 5) (6 EC vereist)			Literature and Colloquium (required, choose 1 of 5) (6 credits required)			
Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Colloquium and Literature Thesis	X_432571	6	1,2,3,4,5,6	-	-	600
Literature thesis and Coll. DDS BDA	X_432570	6	1,2,3,4,5,6	-	v, pres	600
Literature thesis and Coll. DDS MC, DD&S	X_432623	6	1,2,3,4,5,6	-	v	600
Literature thesis and Coll. DDS MC, DDTF	X_432624	6	1,2,3,4,5,6	-	-	600
Literature thesis and Colloquium DDS Molecular Toxicology, DDSA (C,E,M)	X_432572	6	1,2,3,4,5,6	-	v, pres	600
DDS Research project (choose 1 of 5) (24 EC vereist)			DDS Research Project (choose 1 of 5) (24 credits required)			
Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Major Research Project DDS Biomolecular Drug Analysis	X_432727	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Medicinal Chemistry, DD&S	X_432728	24	1,2,3,4,5,6	pro	v, pres, o	600
Major Research Project DDS Medicinal Chemistry, DDTF	X_432729	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Molecular Toxicology, CMCT	X_432730	24	1,2,3,4,5,6	pro	-	600
Major Research Project DDS Molecular Toxicology, DDSA	X_432731	24	1,2,3,4,5,6	pro	v, pres	600
Aangeraden keuzevakken (12 EC keuzeruimte)			Recommended electives (12 credits)			
Educational component	Subject code	Number of credits	Period or semester	Teaching method	Examination format	Level
Business Management in Health and Life Sciences	AM_470584	6	2	h	t, v	500
Entrepreneurship in Health and Life Sciences	AM_470575	6	2	h, w	t, o	500
Policy, Politics and Participation	AM_470589	6	2	h, w	v, pres	500
Clinical development and clinical trials	AM_470585	6	3	h, w	t	500