



# Teaching and Examination Regulations

## Bachelor's degree programmes ESE

### Academic year 2015-2016

- **Economics and Business Economics**
- **Fiscal Economics**
- **Econometrics and Operations Research**

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Intended learning outcomes of the programmes [only in Dutch available]

# **Section 1 - General provisions**

## **Article 1 - Applicability of the regulations**

These regulations apply to the bachelor's degree programmes Economics and Business Economics, Fiscal Economics, and Econometrics and Operational Research, hereinafter called: the programmes. The programmes are organised by the Erasmus School of Economics of the Erasmus University Rotterdam, hereinafter to be referred to as: the school.

## **Article 2 - Definitions**

In these regulations the following terms are understood to mean:

- a. the act: the Dutch Higher Education and Research Act;
- b. participation in study choice activities: the full completion of the activities provided by the school for each programme, in which prospective students with a Dutch VWO certificate are required to participate;
- c. student: anyone enrolled with the university for attending courses and/or taking the examinations and exams for a programme; for the further application of these regulations this also includes people enrolled as course participants;
- d. course participant: anyone enrolled with the university solely for attending courses and/or taking examinations for a programme;
- e. study schedule: an overview of all education units with the associated credits per programme;
- f. credit: unit in which the full student workload is expressed, whereby one credit equals 28 hours of study (in accordance with the European Credit Transfer System - ECTS);
- g. course guide: contains all information about the education units that are taught at the school in a specific academic year;
- h. academic year: the period of time that coincides with the period established in article 39 of these regulations;



- i. Rules and Regulations: the guidelines and instructions from the Examination Board as meant in article 7.12b of the act;
- j. exam: the total of all education units passed by the student that entitles the student to a bachelor's degree;
- k. education unit: an independent part of an exam, for instance a course, seminar or thesis;
- l. degree: a degree is awarded when the minimum number of credits for the exam of a programme has been obtained as required according to the Teaching and Examination Regulations;
- m. degree certificate: documentary evidence that the exam has been passed, in accordance with article 7.11 subsection 2 of the act;
- n. examiner: the person who in accordance with article 7.12c of the act is authorised to hold examinations for the education unit concerned;
- o. examination: a written, oral or other test, including tutorials or a combination thereof, of the knowledge, understanding and skills of the student, as well as the assessment of the results of that test;
- p. tutorial: a practical exercise, as meant in article 7.13 of the act, in one of the following forms:
  - attending a seminar,
  - writing a thesis,
  - completing an internship,
  - or participating in another educational learning activity aimed at acquiring specific skills, like a Bachelor-1 or Bachelor-2 tutorial;
- q. resit: an examination scheduled in the examination period following the examination period of the last lecturing term of the academic year;
- r. lecturing term: the period of an education unit during which teaching is given. The lecturing term also includes the teaching-free period and possible holidays but not the examination period;
- s. examination period: the period during which examinations can be scheduled. The examination period of an education unit usually follows the associated lecturing term. At the end of all lecturing terms and associated examination periods an examination period is scheduled for all resits;
- t. Thesis Workflow: the digital thesis supervision and assessment system of the school;
- u. result: assessment of an education unit registered in OSIRIS;
- v. partial result: the assessment of an partial test that is not registered in OSIRIS;
- w. partial test: the examination taken during the lecturing term of an education unit, the assessment of which is taken into consideration when establishing the result of this education unit;
- x. compensation regulation: for Bachelor-1 and Bachelor-2 this regulation regulates the option to compensate results between 4.5 and 5.4 for education units within clusters of education units established for that purpose;
- y. bonus scheme: regulates the option to adjust the result upwards on account of extra achievements during a lecturing term.

### **Article 3 - Intended learning outcomes of the programmes**

1. The qualities in the field of understanding, knowledge and skills as meant in article 7.13 subsection 2c of the law, that a student must have acquired upon completion of the program, will be elaborated in the intended learning outcomes of the programme.
2. The intended learning outcomes of the programmes are included in the Appendix to these Teaching and Examination Regulations.

### **Article 4 - Full-time / part-time**

The programmes are full-time programmes.

### **Article 5 - The exams of the programmes**

In each of the programmes only the final exam as meant in article 7.10a of the Act, hereinafter called the exam, can be taken.

### **Article 6 - Student workload**

1. Each of the programmes has a student workload of 180 credits.
2. The student workload for education units is expressed in whole credits.



## Article 7 - Language of teaching and examinations

1. With due regard for the code of conduct adopted by the Executive Board of the Erasmus University Rotterdam, the language for programmes and examinations is Dutch, unless the course guide specifies otherwise.
2. Participation in the educational programmes and examinations requires a sufficient command of the Dutch language. This requirement is met with when students:
  - a. are in possession of a pre-university education (Dutch VWO) certificate and the subject Dutch has formed part of the examination to obtain that certificate; or
  - b. have passed the test 'Dutch as a Second Language, level two' (NT-2, Examination II).
3. Participation in the educational programmes and examinations for the English language components of the programme requires a sufficient command of the English language. This requirement is met with when students:
  - a. are in possession of a pre-university education (Dutch VWO) certificate and the subject English has formed part of the exam to obtain that certificate; or
  - b. are in possession of a secondary education certificate, obtained from an institution for secondary education in one of the following countries: Australia, Canada (with the exception of Quebec), New Zealand, Ireland, the United Kingdom or the United States of America; or
  - c. are in possession of a Dutch HBO certificate for four-year higher professional education and the subject English has formed part of the exam to obtain that certificate; or
  - d. have passed one of the following tests:
    - internet-based TOEFL with a score of 80 or higher;
    - IELTS with a score of 6.0 or higher.

## Article 8 - Assignment of consecutive master's degree programme

Persons who have passed the exam for one of the programmes are admitted to the following consecutive master's degree programmes of the school:

1. Bachelor Economics and Business Economics:
  - a. Master Economics and Business
  - b. Master Accounting, Auditing and Control
2. Bachelor Fiscal Economics:
  - a. Master Fiscal Economics
  - b. Master Economics and Business
  - c. Master Accounting, Auditing and Control
3. Bachelor Econometrics and Operations Research:
  - a. Master Econometrics and Management Science
  - b. Master Economics and Business
4. Bachelor Economics and Informatics:
  - a. Master Economics and Informatics
  - b. Master Economics and Business

## Section 2 - Structure of the programmes

### Article 9 - Composition of the exam

1. The exam of the programmes comprises the education units included in the study schedules with the stated student workload. These study schedules form an integral part of these Teaching and Examination Regulations and also include compensation regulations.
2. Bachelor-1 Fiscal Economics corresponds with Bachelor-1 of the Bachelor's programme for Economics and Business Economics. The bachelor-1 Fiscal Economics also includes the education unit Introduction Fiscal Economics.
3. The descriptions of the education units mentioned in the first subsection, included in the course guide, form an integral part of these Teaching and Examination Regulations.
4. If education units have a Dutch and an English version, both versions must have a similar type of education and an identical examination. Any exceptions have to be approved in advance by the Programme Board.



5. The transition regulations of the programmes as published on the school's website, form an integral part of these Teaching and Examination Regulations.

## Article 10 - Stipulations for tutorials in the programmes

1. The course guide lists the tutorials that are offered and their form.
2. Participation in a tutorial is only possible for students who have registered in time via SIN-Online for this tutorial. The registration period runs from four weeks to five days before the start of the new lecturing term. After the regular registration period has ended, registration with the ESC is still possible until a week after the start of the lecturing term. For this option €20 in administrative charges has to be paid per tutorial. Students are assigned to the tutorial group where at that time places are still available.
3. Participation in the tutorials for the Bachelor-1 education units for the programmes is compulsory. All first-year students will be registered for these practicals by the school. Per education unit students have to attend at least 70% of the tutorials.
4. Contrary to subsection 3, students of the BSc2 Econometrics/Economics programme, as meant in article 30, are not obliged to attend the tutorials of the bachelor-1 education units Accounting, Marketing and Organisation and Strategy of the IBEB programme in year 2 of the BSc2 programme.
5. HBO and university pre-master students, part-time students and course participants are exempt from the obligation to attend 70% of the tutorials for Bachelor-1 education units.
6. Students who have obtained a valid (registered in OSIRIS) but insufficient result for a Bachelor-1 education unit (and therefore have complied with both the minimum obligation to attend and the examination participation), do not have to comply with the minimum obligation to attend 70% when they have to redo the same education unit in a following academic year.
7. In the lecturing term of an education unit that is concluded with a separate examination (excluding seminars), assignments can be handed in or partial tests can be taken until at the latest one week before the examination takes place.
8. For the education units Take-Off Bachelor and Introductie Fiscale Economie a 100% obligation to attend applies.
9. For the seminars a 100% obligation to attend applies.
10. Theses have to be written individually on a subject from the programme concerned. For Fiscal Economics the thesis must be written on a tax subject from the bachelor's programme. For Econometrics and Operations Research it can be required that the thesis is written on a subject from the major seminar.

## Section 3 - Taking examinations

### Article 11 - Sequence of examinations

1. Admission to the Bachelor-2 and Bachelor-3 courses of a programme is only available to students who have received a positive binding study advise of the programme concerned.  
For students of the BSc<sup>2</sup> Econometrics/Economics programme applies that admission to the bachelor-3 course Philosophy of Economics can take place at the start of the programme; admission to the bachelor-2 courses Finance 1, Applied Microeconomics, Introduction to Behavioural Economics and Intermediate Accounting can take place after the student has received a positive binding study advice from the Econometrics and Operational Research programme or from the Econometrie and Operationele Research programme.
2. Admission to the seminars for Bachelor-3, Integratie Fiscale Economie and writing a thesis is only available to students who have at least fully completed Bachelor-1 and Bachelor-2 for the programme concerned.  
For students of the BSc<sup>2</sup> Econometrics/Economics programme applies that admission to the major seminars for IBEB can only take place after in any case year 1 and year 2 of the programme as well as the bachelor-2 course International Economics from year 3 have been passed.
3. Admission to the internship for Econometrics and Operations Research is only available to students who have passed the Basiswerkcollege Case Studies Econometrie en Operationele Research.
4. Admission to the Bachelor's thesis for Econometrics and Operations Research is only available to students who have passed the Werkcollege Case Studies Econometrie en Operationele Research.



## **Article 12 - Periods and frequency of examinations; examination schedule**

1. Twice per academic year examinations can be taken for the education units meant in article 9.
2. Contrary to the previous subsection tutorials and partial tests are offered only once a year.
3. Per academic year students can take part in a maximum of three Bachelor-1 resits and three Bachelor-2 resits per programme.
4. Students who have registered for more than one programme can file a reasoned written request with the Examination Board to be allowed to take more than three resits for Bachelor-1 and/or Bachelor-2 courses.
5. Students can take written examinations for the programme for which they have been registered according to an examination schedule to be determined annually by the Examination Board.

## **Article 13 - Provisions concerning registration for taking part in written examinations**

1. Only the student who has registered in time via OSIRIS for a written examination which he is entitled to, can take part in that examination.
2. The registration period runs from 35 to 7 days before the examination.
3. After the regular registration period has ended, registration with the ESSC is still possible until the penultimate week day prior to the examination. For this option €13.50 has to be paid per examination.
4. When an examination is nevertheless taken contrary to one of the previous subsections of this article, the result of the relevant examination can still be registered in OSIRIS, but only against payment of €20 in administrative charges at the ESC. This registration can only be made and paid for from the last but one working day up to and including the day the examination was taken. If the examination ends at a time when the Information Desk is closed, payment has to be made on the next working day.

## **Article 14 - Form of the examinations**

1. Bachelor-1 and Bachelor-2 examinations are in writing (closed book) and/or by practical exercise, unless the Programme Board decides otherwise.
2. Bachelor-3 examinations are in writing and/or oral and/or by practical exercise, unless the Programme Board decides otherwise.
3. The result of the whole of the partial tests can be included in the determination of the final grade for Bachelor-1 or Bachelor-2 courses for a maximum of 30%.
4. Oral examinations can never determine more than 50% of the result of an education unit.
5. Written examinations can never determine 100% of the result of a seminar.
6. Multiple-choice examinations are offered in at least two versions and have to number at least 40 questions.
7. For examinations with both open-ended and multiple-choice questions the minimum number of multiple-choice questions is determined by multiplying the percentage for which the multiple-choice questions determine the grade for this examination by 40.
8. Any exceptions to the rules set out in the previous subsections have to be approved in advance by the Programme Board.
9. Bonus schemes have to be approved in advance by the Programme Board.
10. If the Programme Board decides that the method of examination as meant in the previous subsections will be different, the Board informs students about this at the latest two months before the examination date.
11. Within the available facilities the Erasmus University offers students with disabilities opportunities to take the examinations in ways that are as much as possible adjusted to their individual disabilities.

## **Article 15 - Oral examinations**

1. Oral examinations are always taken individually.
2. In principle, oral examinations are public.



## Section 4 - Examination results

### Article 16 - Establishment, publication and registration of examination results; marking term

1. Immediately after an oral examination the examiner determines the result in writing and presents the student with a signed copy.
2. The examiner establishes the result of a written examination as soon as possible and ensures that the result of that education unit is correctly submitted to the Exam Administration ESE at the latest three weeks after the day that the examination was taken (except for the periods when the Erasmus University is closed), on the understanding that in any case the result of the examination is known at the latest one week before the beginning of the resit period of the relevant programme phase. In the event of force majeure the Examination Board can allow deviation from these terms.
3. Each time that the term as meant in subsection 2 is exceeded, the Programme Board will charge a fine of €2,500 to the organisational unit responsible for the teaching and examination of the education unit concerned.
4. If it concerns an education unit that plays a crucial role in establishing the Binding Study Advice as meant in article 28, the Examination Board can contrary to subsection 2 request the examiner to deliver the result for that education unit to the Exam Administration ESE earlier than three weeks after the day on which the written examination was taken.
5. The Exam Administration ESE checks whether the marking term for the written examinations has been observed and informs the Examination Board in time when this term is exceeded.
6. The examiner establishes the result of a seminar as soon as possible and ensures that the result of that seminar is correctly submitted to the Exam Administration ESE at the latest three weeks after the lecturing term has ended (except for the periods when the Erasmus University is closed).
7. In good consultation, the examiner and a second assessor jointly determine the result for a thesis in the Thesis Workflow, at the latest three weeks after the student has submitted the final version (except for the periods when the Erasmus University is closed) and has completed the thesis-and-curriculum evaluation.
8. The examiner determines partial results as soon as possible and ensures that these are published at the latest before the beginning of the written examination.
9. The examiner immediately and correctly informs the Exam Administration ESE about the result of an education unit.
10. The Exam Administration ESE ensures the correct entry into OSIRIS of the results of examinations, education units and examinations. The Exam Administration ESE also registers the certificates that have been awarded to students. No information about registered data is disclosed to any persons other than the student, the Examination Board, the Executive Board of the Erasmus University Rotterdam, de Study Advisors, the Student Counsellors and the Examinations Appeals Board, with the exception of data about awarded certificates. The provisions in the preceding sentence can be deviated from with permission from the student.
11. The involvement of the Exam Administration ESE as meant in the previous subsections is without prejudice to what the Executive Board of the Erasmus University Rotterdam has determined on the matter.
12. In very exceptional cases the Examination Board can declare an examination invalid. In that case, the Examination Board in consultation with the responsible examiner(s) determines the date on which the new examination will be taken.

### Article 17 - Term of validity

1. Education units of the examination completed with sufficient or compensable results remain valid for six years.
2. The period of validity mentioned in subsection 1 also applies to exemptions granted and to education units taken elsewhere, calculated from the time that the Examination Board decided on this.
3. At the request of students the Examination Board can in exceptional cases extend the period of validity of an education unit completed with a sufficient or compensable result for a maximum of one year.
4. Partial results become void at the latest at the end of the academic year in which they have been obtained.



5. Results of or exemptions for education units from Bachelor-1 become void immediately after the Examination Board has determined a negative binding study advice.

## **Article 18 - Right of inspection; inspection of old examination questions**

1. Within four weeks after the result of a written examination has been published, but at the latest one week before the resit, students are, on request, allowed to inspect their assessed work. The examiner can, with due regard for the provisions in the third subsection, make further arrangements for the practical implementation of this.
2. During the term mentioned in the first subsection all students are allowed, on request, to inspect the questions and assignments of a written examination, and if possible the standards on the basis of which the assessment has taken place.
3. The examiner may decide that inspection takes place at a fixed location and time and announces this at the latest two working days before the inspection. Students who have been unable to attend this inspection due to force majeure are offered another opportunity by the examiner.
4. If they so desire, students meant in the first subsection are given an opportunity to make copies (or to have copies made) of their assessed work against payment during the term mentioned in the first subsection or at a location and time to be determined by the examiner.
5. The examiner ensures that at the latest in week 5 of the lecturing term a model examination including indications of the answers that the examiner considers representative of the material to be studied, is made available to students.

## **Section 5 - Exemptions**

### **Article 19 - Exemptions from education units**

1. At the request of students, the Examination Board can grant exemptions from an education unit meant in article 9 on the basis of:
  - either a successfully completed education unit from another university programme in the Netherlands, provided that in the judgement of the Examination Board this unit is equal or comparable as regards content, student workload and level;
  - or a successfully completed education unit from a higher professional education programme in the Netherlands, with the exception of the education units from the propaedeutic year, provided that in the judgement of the Examination Board this unit is equal or comparable as regards content, student workload and level;
  - or a successfully completed education unit from a higher education programme from outside the Netherlands, provided that in the judgement of the Examination Board this unit is equal or comparable as regards content, student workload and level.
2. The Examination Board asks the examiner(s) concerned for their advice before taking a decision.
3. In principle, no exemptions are granted for education units from Bachelor-1 and for seminars and theses.
4. Education units can only be brought into one marked programme. For the other programme(s) the education unit concerned is brought in as 'fulfilled'.
5. A thesis of 8 cr on a fiscal-economic subject can be brought into the Fiscal Economics programme with a grade and into the Economics programme with a 'fulfilled'.
6. A thesis of 8 cr on an econometrics subject can be brought into the Econometrics programme with a grade and into the Economics programme with a 'fulfilled'.

## **Section 6 - Exam results**

### **Article 20 - The determination of the result of the exam**

1. The Examination Board determines whether a student can be awarded a degree.
2. After all education units for the exam as meant in article 9 have been passed, the exam result is determined by the Examination Board, with observance of the Teaching and Examination Regulations of the programme and the Rules and Regulations of the Examination Board.



## Article 21 - Degree

1. Students who have passed the exam are awarded the degree of 'Bachelor of Science in [degree programme name]' by the Executive Board of the Erasmus University Rotterdam.
2. The degree awarded is stated on the certificate.

## Section 7 - Previous education

### Article 22 - Alternative requirements for previous education deficiencies

1. Previous education deficiencies for the Economics and Business Economics and Fiscal Economics programmes as regards the subject of Mathematics are offset by a result of at least 7.5 for the Mathematics level 2 deficiency test to be taken for that purpose.
2. Previous education deficiencies for the Econometrics and Operations Research programme as regards the subject of Mathematics (Mathematics A but no Mathematics B) are offset by a result of at least 7.5 for the Mathematics level 3 deficiency test.
3. The requirement as regards a sufficient command of the Dutch language is fulfilled by successful completion of the 'Dutch as a Second Language test, level two' (NT - 2, Examination II).
4. If the further previous education requirement for Economics-1 as meant in article 7.25 subsection 2 of the Act has not been fulfilled, exemption is granted from the test as meant in article 7.25 subsection 5 of the Act.

### Article 23 - Equivalent previous education

1. Article 22 similarly applies to holders of secondary or pre-university education certificates, either or not issued in the Netherlands, that by ministerial regulation are considered as at least equivalent to the Dutch pre-university education certificate.
2. Holders of other secondary or pre-university education certificates issued outside the Netherlands that in the country of origin allow access to university education can be granted exemption by the Executive Board of the Erasmus University Rotterdam from the previous education requirements meant in article 7.24, first subsection of the Act, provided that they fulfil the requirements mentioned in article 24 of these regulations as regards English and Mathematics.
3. Holders of a propaedeutic certificate from one of the Dutch HBO programmes AC, BE, CE, MER, LE or SPD can be granted access by the Executive Board to the Economics and Business Economics or Fiscal Economics programme, provided they meet the following requirements: propaedeuse completed with a weighted average of at least 7.5 and a result of at least 7.5 for the Mathematics level 2 deficiency test as referred to in article 22 subsection 1 of this regulation.
4. Holders of a propaedeutic certificate from the Dutch HBO programme Business Mathematics can be granted access by the Executive Board to the Econometrics and Operations Research programme, provided they meet the following requirements: propaedeuse completed with a weighted average of at least 7.5 and a result of at least 7.5 for the Mathematics level 3 deficiency test as referred to in article 22 subsection 2 of this regulation.
5. Holders of a final certificate from a recognized Dutch HBO programme or from a Dutch university bachelor or master programme can be granted access by the Executive Board to the Economics and Business Economics or the Fiscal Economics programme, provided they meet the following requirement: a result of at least 7.5 for the Mathematics level 2 deficiency test as referred to in article 22 subsection 1 of this regulation.
6. Holders of a final certificate from a recognized Dutch HBO programme or from a Dutch university bachelor or master programme can be granted access by the Executive Board to the Econometrics and Operations Research programme, provided they meet the following requirement: a result of at least 7.5 for the Mathematics level 3 deficiency test as referred to in article 22 subsection 2 of this regulation.



## **Article 24 - Colloquium doctum**

1. The following requirements apply to the admission test as meant in article 7.29 of the Act, hereinafter called: the colloquium doctum:
  - For Economics and Business Economics, and Fiscal Economics:
    - a. Mathematics A (minimal 7.5)
    - b. Economics
    - c. Dutch
    - d. English
  - For Econometrics and Operational Research:
    - a. Mathematics B (minimal 7.5)
    - b. Economics
    - c. Dutch
    - d. English
2. The requirements set for the colloquium doctum can be met by achieving the concerning Dutch VWO certificates.

## **Article 25 - Entrance requirements for holders of foreign certificates that have not been recognised as equivalent with the Dutch pre-university education certificate by ministerial regulation**

Without prejudice to the requirements stated in article 22, third subsection, as regards the Dutch language, holders of certificates as meant in article 23, second subsection, can be admitted to the programmes by the Executive Board of the Erasmus University Rotterdam after they have fulfilled the requirements mentioned in article 24 as regards English and Mathematics.

## **Section 8 - Study choice activities**

### **Article 26 - Study choice activities**

1. Prospective students with a Dutch VWO certificate who for the first time apply for one of the programmes, are required to participate in the study choice activities of that programme.
2. The Executive Board can refuse the enrolment for the programme of a prospective student who without valid reasons did not participate in the study choice activities of the programme and/or applied after 1 May.
3. Further details of the study choice activities are published on the school's website.

## **Section 9 - Student counseling and study advice**

### **Article 27 - Student counseling**

1. The Programme Board provides individual counseling for students enrolled in the programmes.
2. The Programme Board ensures that at the latest at the start of the education unit the lecturer responsible has published an overview of the lecturing and examination material in the course guide. The lecturer responsible has to indicate how the material for the education unit has been distributed across the lectures and tests (assignments, partial tests, examinations).
3. If books and/or workbooks are not yet available at the start of the education unit, the lecturer responsible makes a studiable alternative available in the first lecture.

### **Article 28 - The binding study advice**

1. At the end of their first year of enrolment for Bachelor-1 for one of the programmes all students receive a written advice concerning the continuation of their studies within or outside the programme. The advice is drawn up during an annual meeting of the Examination Board in conjunction with the bachelor coordinator concerned and is issued by the chairman of the Examination Board under a mandate from the Dean.



2. In derogation from subsection 1 and subsection 5 students of the BSc<sup>2</sup> Econometrics/Economics programme also receive a written advice concerning the continuation of their IBEB studies at the end of their second year of enrolment for bachelor-1 of the IBEB programme.
3. The chairman of the Examination Board can attach a rejection to the study advice for the programme concerned on the basis of article 7.8b, third subsection of the Act, as long as the student has not yet passed all education units for Bachelor-1 of the programme. This rejection is only attached if students, with due regard for their personal circumstances, are not considered suitable for the programme, because their study results do not meet the requirements as meant in subsection 6, 7 or 8. The rejection applies to a term of three academic years.
4. Rejections for Economics and Business Economics also apply to Fiscal Economics and vice versa.
5. The study advice is given during the first year of enrolment, after the final results for the education units of Bachelor-1 for the programme at the end of the academic year, but at the latest before the start of the new academic year.
6. The binding study advice is subject to the norm that at the end of the first year of enrolment all education units for Bachelor-1 of the programme have been obtained.
7. In derogation from the previous subsection the binding study advice for students of the Mr.Drs. programme is subject to the norm that at the end of the first year of enrolment a minimum of 60 credits has been obtained for bachelor-1 of the Economics and Business Economics and Law programmes, of which at least 48 credits (including the fives compensated within a completed cluster) for Bachelor-1 of the Economics and Business Economics programme.
8. In derogation from subsection 6 the following norm applies to the binding study advice for students of the BSc<sup>2</sup> Econometrics/Economics programme:
  - a. at the end of the first year of enrolment all education units for bachelor-1 of the Econometrics and Operations Research programme should have been passed; and
  - b. at the end of the second year of enrolment the Accounting, Skills and Guidance, Marketing, and Organisation and Strategy courses of the IBEB programme should have been passed.
9. During the first year of enrolment the Examination Board issues a preliminary advice at least twice. Further details of student counseling and study progress control during Bachelor-1 of the programme are published on the school's website.
10. Personal circumstances that are taken into account for the study advice are exclusively limited to:
  - a. illness of the person concerned;
  - b. physical, sensory or other disabilities of the person concerned;
  - c. pregnancy of the person concerned;
  - d. special family circumstances;
  - e. membership of the University Council, the School Council, the school's management team, the management of the programme or the Education Committee;
  - f. other circumstances as meant in article 2.1 of the 'Uitvoeringsbesluit WHW' [*Higher Education and Research Funding Decree*].Students who as a result of personal circumstances can reasonably expect to incur a delay in their studies are obliged to inform the Study Advisor in time. The object of the notification is to limit any study delay as a result of the circumstances and, if necessary in the opinion of the Study Advisor, to draw up an individual study plan. Notifications are timely if made within four weeks after the beginning of a circumstance.
11. The study advice is in writing and includes:
  - a. the standard that applies to the student concerned, expressed in the number of credits to be obtained for Bachelor-1 of the programme;
  - b. the number of credits obtained for Bachelor-1 of the programme;
  - c. whether or not a rejection is attached to the advice, as meant in article 7.8b, third subsection of the Act;
  - d. if a rejection is attached to the study advice:
    - the notification that in the next three academic years the student cannot enrol as a student or as an extraneus for the programme;
    - advice on continuation of the study within or outside the Erasmus University Rotterdam;
  - e. the possibility of appeal with the Examinations Appeals Board and the term within which the appeal has to be lodged.



## Section 10 - Double programmes

### Article 29 - Mr.Drs. programme

1. In cooperation with the Erasmus School of Law of the Erasmus University the school has set up a Mr.Drs. programme for economics and law. This is a study path with which students with an average pre-university final examination grade of at least 7.0 can complete both a bachelor's and master's programme in economics and a bachelor's and master's programme in law in six years.
2. Students who have been admitted to the Mr.Drs. programme are entitled to a number of extra facilities, including a customized binding study advice for the Dutch Law Bachelor's programme, a more relaxed binding study advise in accordance with article 28 subsection 6 in the Economics and Business Economics Bachelor's programma, study advice for this twin study from the Mr.Drs. programme coordinator and a separate regulation to participate in the education of bachelor-1 courses.
3. A student who under subsection 1 is not admitted to the Mr.Drs. programme can still be admitted to the programme in the second year of enrollment at Erasmus University if in the first year of enrollment he has completed the bachelor-1 of Economics and Business or Dutch Law with a weighted average of at least 7.0.
4. Mr.Drs. students who during their Economics and Business and/or Dutch Law studies have on average obtained fewer than 43 credits per academic year can be refused access to the Mr.Drs. programme by the Mr.Drs. programme coordinator.

### Article 30 - BSc<sup>2</sup> Econometrics/Economics programme

1. The school has set up a BSc<sup>2</sup> Econometrics/Economics programme. This is a study path with which students with an average pre-university final examination grade of at least 7.0 can complete both the bachelor's programme for Econometrics and Operations Research and the IBEB bachelor's programme in four years.
2. Students who have been admitted to the BSc<sup>2</sup> Econometrics/Economics programme are entitled to a number of extra facilities, including a customized binding study advice in the IBEB programme in accordance with article 28 subsection 8 and access to selected BSc<sup>2</sup> tutorials.
3. BSc<sup>2</sup> students for whom the student workload is afterwards found to be too high can switch to one of the two regular programmes.

### Article 31 - Economics and Philosophy programme

1. In cooperation with the Faculty of Philosophy of the Erasmus University the school has set up an Economics and Philosophy programme. This is a study path with which students in four years can complete both one of the programmes and a bachelor's programme Philosophy of Economics.
2. A student can be admitted to the Economics and Philosophy programme after he has completed the bachelor-1 of one of the programmes with a pass.
3. Students who have been admitted to the Economics and Philosophy programme are entitled to a number of extra facilities, including an exemption for the bachelor-3 course Filosofie van de economie/Philosophy of Economics.

## Section 11 - Free bachelor's exam

### Article 32 - Bachelor's exam with a student-selected programme

1. Subject to approval from the Examination Board students can compose their own programme from education units offered by the Erasmus University Rotterdam or other universities to which the bachelor's exam for one of the programmes is attached.
2. The provisions of these Teaching and Examination Regulations similarly apply to a programme approved by the Examination Board as meant in the previous subsection.



## Section 12 - Bachelor Honours Programmes

### Article 33 - Bachelor Honours Class

1. First-year students who have passed all Bachelor-1 education units from lecturing terms 1, 2 and 3 of their programme with excellent results can apply for a place in the Bachelor Honours Class after lecturing term 3. Students will be selected by a selection committee on the basis of a motivation letter, an essay and an interview. The number of available slots is established annually and published on the school's website. Decisions by the selection committee are not open to appeal.
2. The enrolment procedure, content and assessment for the Bachelor Honours Class are published on the school's website and form an integral part of these Teaching and Examination Regulations, without prejudice to the other provisions in these regulations.
3. Students who have passed the Bachelor Honours Class receive a certificate authenticated by the school in addition to their certificate.

### Article 34 - Bachelor Honours Research Class

1. Second-year students who have passed all Bachelor-2 education units from lecturing terms 1, 2 and 3 of their programme with excellent results can apply for a place in the Bachelor Honours Research Class after lecturing term 3. Students will be selected by a selection committee on the basis of a motivation letter, an essay and an interview. The number of available slots is established annually and published on the school's website. Decisions by the selection committee are not open to appeal.
2. The enrolment procedure, content and assessment for the Bachelor Honours Research Class are published on the school's website and form an integral part of these Teaching and Examination Regulations, without prejudice to the other provisions in these regulations.
3. Students who have passed the Bachelor Honours Research Class receive a certificate authenticated by the school in addition to their certificate.

## Section 13 - Hardship clause

### Article 35 - Hardship clause

In highly exceptional individual circumstances where application of one or more provisions from these Teaching and Examination Regulations would result in evidently unreasonable and/or unfair situations, the competent body can on the basis of a written and reasoned request from the person concerned deviate from said provision(s) in favour of the person concerned.

## Section 14 - Right of appeal

### Article 36 - Right of appeal

Decisions from Examination Boards and examiners can be appealed against to the Examinations Appeals Board under article 7.60 of the Act.

## Section 15 - Concluding and implementation provisions

### Article 37 - Amendments

1. Amendments to these regulations are determined by the Dean in separate decisions.
2. No amendments are made that apply to the current academic year, unless the interests of students would in all likelihood not be prejudiced as a result.
3. Furthermore, amendments cannot adversely influence decisions with respect to students taken by the Examination Board under these regulations.



## **Article 38 - Publication**

The Dean ensures proper publication of these regulations, of the Rules and Regulations laid down by the Examination Board and of amendments to these regulations.

## **Article 39 - Entry into force**

These regulations become effective on 29 August 2015 and remain valid up to and including 26 August 2016.

Thus laid down by order of the Dean of the Erasmus School of Economics on 2 July 2015.

Amended by adding Article 29 subsection 4 article by order of the Dean of the Erasmus School of Economics on 20 August 2015.



## Appendix

### Intended learning outcomes of the programmes [only in Dutch available]

#### Economie en Bedrijfseconomie

##### Kennis en inzicht

###### 1 Weergeven en interpreteren

Studenten beschikken over grondige kennis van de (bedrijfs-) economische wetenschap.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

1.1 Weergeven en interpreteren van de belangrijkste concepten van de micro-economie: keuze en besluitvorming; informatie en onzekerheid; gedrag van huishoudens en bedrijven; organisaties en markten; allocatie en welzijn en gedragseconomie.

1.2 Weergeven en interpreteren van de belangrijkste concepten van de macro-economie en internationale economie: macro-economische modellen; economische groei; conjunctuur; geld en rentepercentages; overheidsfinanciën; handel en internationale financiële systemen.

1.3 Weergeven en interpreteren van de belangrijkste concepten van de meso-economie: marktstructuur en -resultaten; bedrijfsstrategie; bedrijfsdoelen en -resultaten; regulering en industrieel beleid.

1.4 Weergeven en interpreteren van de belangrijkste concepten van de bedrijfs-economie: financial accounting; management accounting; corporate finance; financiële markten; marketing en organisatie.

1.5 Weergeven en interpreteren van de belangrijkste concepten van de methodologie, filosofie van de economie en geschiedenis van het economisch denken.

1.6 Weergeven en interpreteren van concepten uit de belangrijkste ondersteunende vakgebieden: wiskunde, statistiek en ICT.

1.7 Tonen van geavanceerde kennis van ten minste één van de deelgebieden onder 1.1 – 1.5.

###### 2 Analyseren en verklaren

Studenten analyseren en verklaren verschijnselen en problemen in de economie van overheid en bedrijf met behulp van hun kennis van de theorieën en methodologie van de economische wetenschap.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

2.1 Toepassen van economische theorieën, onderzoeksmethoden en -technieken en statistiek op problemen van (bedrijfs-) economische aard, gebruikmakend van relevante wetenschappelijke literatuur.

2.2 Analyseren, verklaren, beoordelen van en adviseren over het gevoerde economische beleid van bedrijven, overheden en organisaties

2.3 Analyseren, verklaren, beoordelen van en adviseren over actuele situaties vanuit de geschiedenis, filosofie en ethiek van het vakgebied.

##### Toepassen kennis en inzicht: onderzoek

###### 3 Formuleren van een doelstelling en probleemstelling

Studenten formuleren probleemstellingen en onderzoeks vragen uitgaande van wetenschappelijke concepten en theorieën.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

3.1 Afbakenen en definiëren van onderzoek op het terrein van de (bedrijfs-) economie.

3.2 Concretiseren, formuleren en operationaliseren van onderzoeks vragen.

###### 4 Keuze van onderzoeksopzet

Studenten kiezen een onderzoeksopzet die aansluit bij de vraagstelling.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

4.1 Selecteren en gebruiken van een relevante kwalitatieve en/of kwantitatieve onderzoeks methode.



## 5 Keuze van onderzoeks methode

*Studenten kiezen één of meer geschikte methoden om gegevens te verzamelen en te analyseren.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 5.1 Gebruikmaken van gangbare wiskundige en statistische methoden binnen het vakgebied.
- 5.2 Efficiënt en effectief gebruikmaken van databanken voor het verzamelen van gegevens, met behulp van internet of bibliotheken.

## 6 Trekken van conclusies

*Studenten doen uitspraken over de initiële probleemstelling op basis van de gevonden resultaten.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 6.1 Analyseren van de verzamelde gegevens en het trekken van conclusies met betrekking tot de onderzoeks vrag, op basis van de verwerkte gegevens.
- 6.2 Reflectie op uitkomsten en conclusies, gelet op de beperkingen van het onderzoek en de onderzoeks methoden.

## Toepassen kennis en inzicht: management

## 7 Ontwerpen van beleidsadviezen

*Studenten doen voorstellen waarmee (bedrijfs-)economische vraagstukken kunnen worden opgelost op basis van relevante concepten en theorieën uit het vakgebied.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 7.1 Vaststellen van beleidsproblemen van economische aard.
- 7.2 Op basis van onderzoeksresultaten beleidsadviezen formuleren, gericht op de oplossing van concrete economische vraagstukken van bedrijven en overheden.

## 8 Strategisch handelen

*Studenten stellen strategische acties voor die genomen kunnen worden door bedrijven of overheden, gebaseerd op hun analyse van economische verschijnselen en problemen.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 8.1 Identificeren van mogelijke knelpunten bij de implementatie van beleidsadviezen.
- 8.2 Beredeneerd inschatten van effecten van beleidsadviezen.
- 8.3 Incalculeren van omgevingsfactoren bij de implementatie van beleidsadviezen.

## Ordeelsvorming

## 9 Vermogen tot abstracteren

*Studenten selecteren relevante onderzoeks vragen en informatie uit een complexe samenhang en kunnen deze doorgronden binnen een gegeven context.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 9.1 Onderscheiden van hoofd- en bijzaken in een complexe context.
- 9.2 Onderkennen van de contextuele afhankelijkheid van hoofd- en bijzaken.

## 10 Analytische grondhouding

*Studenten trekken logische conclusies uit gegeven aannames.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 10.1 Deduceren van conclusies uit gegeven premissen.
- 10.2 Maken van logische gevolgtrekkingen uit waarneembare feiten.

## 11 Onderzoekende grondhouding

*Studenten baseren uitspraken over de werkelijkheid op betrouwbare gegevens.*



Studenten zijn aan het einde van de bachelorfase in staat tot het:

11.1 Een beleidsprobleem herleiden tot een onderzoeks vraag.

11.2 Benadrukken van de relatie tussen de vraagstelling en conclusies van een onderzoek.

## 12 Interpretatiekaders

*Studenten gebruiken verschillende gezichtspunten bij het doen van uitspraken over de werkelijkheid.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

12.1 Onderscheiden van relevante interpretatiekaders in een gegeven probleemsituatie.

12.2 Herinterpretieren van probleemsituaties door gebruik te maken van verschillende interpretatiekaders.

## Communicatie

### 13 Samenwerken

*Studenten werken professioneel en doelgericht samen in teams en erkennen het belang, de positie en waarden van anderen.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

13.1 Samenwerken met medestudenten in taakgerichte groepen van verschillende structuur (mono- of multidisciplinair).

13.2 Omgaan met de (spannings-)relaties tussen verschillende individuen in de groep.

## 14 Communicatie

*Studenten communiceren, zowel schriftelijk als mondeling, effectief met personen en groepen van uiteenlopende aard.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

14.1 Presenteren van informatie, ideeën, onderzoeksresultaten en beleidsadviezen in zowel schriftelijke als mondelijke vorm.

14.2 Onderscheiden van hoofd- en bijzaken in mondelijke en schriftelijke communicatie.

14.3 Consistent en overtuigend argumenteren.

14.4 Maken van keuzes over de vorm en stijl van presenteren, afhankelijk van de gelegenheid, het publiek en de doelstellingen.

## Leervaardigheden

### 15 Zelfsturing

*Studenten profileren zich als een verantwoordelijke en academisch opgeleide professional, die over de leervaardigheden beschikt om een vervolgopleiding aan te gaan, waarvoor een hoge mate van autonomie nodig is.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

15.1 Innemen en verantwoorden van de eigen positie t.a.v. economische ontwikkelingen en onderzoek daarnaar.

15.2 Nemen van verantwoordelijkheid voor het eigen leerproces.



## Fiscale Economie

### Kennis en inzicht

#### 1 Weergeven en interpreteren

*Studenten beschikken over grondige kennis van de (bedrijfs-) economische wetenschap en grondige kennis van en inzicht in de structuur van belastingwetgeving en belastingstelsels.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 1.1 Weergeven en interpreteren van de belangrijkste concepten van de micro-economie: keuze en besluitvorming; informatie en onzekerheid; gedrag van huishoudens en bedrijven; organisaties en markten; allocatie en welzijn; gedragseconomie.
- 1.2 Weergeven en interpreteren van de belangrijkste concepten van de macro-economie en internationale economie: macro-economische modellen; economische groei; conjunctuur; geld en rentepercentages; overheidsfinanciën, handel; internationale financiële systemen.
- 1.3 Weergeven en interpreteren van de belangrijkste concepten van de meso-economie: marktstructuur en –resultaten; bedrijfsstrategie; bedrijfsdoelen en –resultaten; regulering en industrieel beleid.
- 1.4 Weergeven en interpreteren van de belangrijkste concepten van de bedrijfseconomie: financial accounting; management accounting; corporate finance; financiële markten; marketing en organisatie.
- 1.5 Weergeven en interpreteren van de concepten van de methodologie, filosofie en ethiek van het economisch denken.
- 1.6 Weergeven en interpreteren van concepten uit de belangrijkste ondersteunende vakgebieden: wiskunde, statistiek en ICT.
- 1.7 Weergeven en interpreteren van mogelijke belastingstelsels en de structuur van de Nederlandse belastingwetgeving.
- 1.8 Weergeven en interpreteren van de verschillende belastingwetten in Nederland, de beginselen van het Europese belastingrecht en van het internationale belastingrecht gericht op de voorkoming van grensoverschrijdende belemmeringen en discriminaties en van dubbele belastingheffing.

#### 2 Analyseren en verklaren

*Studenten kunnen fiscale wetgeving en jurisprudentie toepassen en interpreteren, mede in hun maatschappelijke context en in het bijzonder in hun (sociaal-) economische samenhang. Met de verworven kennis kunnen zij de economische effecten van belastingheffing op ondernemersgedrag en handelen van burgers analyseren en verklaren. Tevens kunnen zij effecten van economische ontwikkelingen op de fiscaliteit onderkennen.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 2.1 Toepassen van economische theorieën, onderzoeksmethoden en -technieken en statistiek op problemen van fiscaal-economische aard, gebruikmakend van relevante wetenschappelijke literatuur.
- 2.2 Analyseren, verklaren en beoordelen van het gevoerde fiscaal-economische beleid van bedrijven, overheden en organisaties.
- 2.3 Analyseren, verklaren en beoordelen van actuele situaties vanuit de historische en wetenschappelijke ontwikkeling van het fiscale vakgebied.

### Toepassen kennis en inzicht

#### 3 Formulering van doelstelling en probleemstelling

*Studenten formuleren een probleemstelling op een fiscaal-economisch deelterrein, uitgaande van wetenschappelijke concepten en theorieën.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 3.1 Definiëren van een probleemstelling op het terrein van de fiscale economie.
- 3.2 Concretiseren, formuleren en operationaliseren van onderzoeks vragen.

#### 4 Keuze van onderzoeksopzet

*Studenten kiezen een onderzoeksopzet die aansluit bij de vraagstelling.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:



4.1 Selecteren en gebruiken van een relevante en kwalitatieve en/of kwantitatieve onderzoeks methode.

### **5 Keuze van onderzoeks methode**

*Studenten kiezen één of meer geschikte methoden om gegevens te verzamelen en te analyseren*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

5.1 Kunnen hanteren van gangbare mathematische en statistische methoden en methoden om kwalitatieve informatie te verwerken.

5.2 Efficiënt en effectief gebruikmaken van databanken voor het verzamelen van gegevens, met behulp van internet of bibliotheken.

### **6 Trekken van conclusies**

*Studenten doen uitspraken over de initiële probleemstelling op basis van de gevonden resultaten.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

6.1 Analyseren van de verzamelde gegevens en het trekken van conclusies met betrekking tot de onderzoeks vrag, op basis van de verwerkte gegevens.

6.2 Reflectie op uitkomsten en conclusies, gelet op de beperkingen van het onderzoek en de onderzoeks methoden.

### **7 Ontwerpen van beleidsadviezen**

*Studenten doen voorstellen waarmee fiscaal-economische vraagstukken kunnen worden opgelost op basis van economische concepten en theorieën.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

7.1 Diagnosticeren van fiscaal-economische beleidsvraagstukken.

7.2 Op basis van onderzoeksresultaten beleidsadviezen formuleren, gericht op de oplossing van concrete fiscale (fiscaal-economische) vraagstukken van bedrijven of overheden.

### **8 Samenhang en interactie**

Studenten leggen verbanden tussen de economie/bedrijfseconomie en de belastingwetgeving.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

8.1 Combineren van verschillende inzichten uit de economie, bedrijfseconomie en de fiscale wetgeving. Zij analyseren en verklaren op basis daarvan het handelen van individuen, gezinnen, ondernemingen en de overheid.

### **Ordeelsvorming**

### **9 Vermogen tot abstraheren**

*Studenten selecteren relevante onderzoeks vragen en informatie uit een complexe samenhang en kunnen deze doorgronden binnen een gegeven context.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

9.1 Onderscheiden van hoofd- en bijzaken in een complexe context.

9.2 Onderkennen van de contextuele afhankelijkheid van hoofd- en bijzaken.

### **10 Analytische grondhouding**

*Studenten trekken logische conclusies uit gegeven aannames. Zij beoordelen hun denkbeelden op hun interne consistentie, empirische validiteit en kracht en stellen deze desgewenst bij en tonen zich hierin creatief.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

10.1 Deduceren van conclusies uit gegeven premissen.

10.2 Maken van logische gevolgtrekkingen uit waarneembare feiten.

### **11 Onderzoekende grondhouding**

*Studenten baseren uitspraken over de werkelijkheid op betrouwbare gegevens.*



Studenten zijn aan het einde van de bachelorfase in staat tot het:

11.1 Herleiden van een beleidsprobleem tot een onderzoeksraag

11.2 Benadrukken van de relatie tussen de vraagstelling en conclusies van een onderzoek.

## 12 Interpretatiekaders

*Studenten gebruiken verscheiden gezichtspunten bij het doen van uitspraken over de werkelijkheid.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

12.1 Onderscheiden van relevante interpretatiekaders in een gegeven probleemsituatie.

12.2 Herinterpretieren van probleemsituaties door gebruik te maken van verschillende interpretatiekaders.

## Communicatie

### 13 Samenwerking

*Studenten werken professioneel en doelgericht samen in teams en erkennen het belang, de positie en waarden van anderen.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

13.1 Samenwerken met medestudenten in taakgerichte groepen van verschillende structuur (mono- of multidisciplinair).

13.2 Omgaan met de (spannings)relaties tussen verschillende individuen in de groep.

### 14 Communiceren

*Studenten communiceren, zowel schriftelijk als mondeling, effectief met personen en groepen van uiteenlopende aard.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

14.1 Presenteren van informatie, ideeën, onderzoeksresultaten en beleidsadviezen in zowel schriftelijke als mondelijke vorm.

14.2 Onderscheiden van hoofd- en bijzaken in de mondelijke en schriftelijke communicatie.

14.3 Consistent en overtuigend argumenteren.

14.4 Maken van keuzes over de vorm en stijl van presenteren, afhankelijk van de gelegenheid, het publiek en de doelstellingen.

## Leervaardigheden

### 15 Zelfsturing

*Studenten profileren zich als een verantwoordelijke en academisch opgeleide professional, die over de leervaardigheden beschikt om een vervolgopleiding aan te gaan, waarvoor een hoge mate van autonomie nodig is.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

15.1 Innemen en verantwoorden van de eigen positie t.a.v. economische ontwikkelingen en onderzoek daarnaar.

15.2 Nemen verantwoordelijkheid voor het eigen leerproces.



## Econometrie en Operationele Research

### Kennis en inzicht

#### 1 Vakspecifieke kennis en vaardigheden

Studenten beschikken over grondige kennis van de econometrie, mathematische besliskunde en hun basisvakken, en zijn vaardig in het hanteren van de bijbehorende technieken.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 1.1 Beheersen van de belangrijkste concepten van de relevante wiskundige en statistische theorieën: wiskundige bewijsvoering, analyse, kanstheorie, inductie, hypothese testen en asymptotiek.
- 1.2 Weergeven en interpreteren van de belangrijkste concepten van de micro-, meso-, macro- en bedrijfseconomie: gedrag van consumenten en bedrijven, informatie en onzekerheid, werking van markten, marktstructuren, macro-economische modellen, economische groei, finance, marketing en logistiek.
- 1.3 Weergeven en interpreteren van de belangrijkste concepten van de informatica, in het bijzonder programmeren: imperatief programmeren, data structuren, object-georiënteerd programmeren, algoritmen en vaardig hanteren van een moderne programmeertaal.
- 1.4 Beheersen van de belangrijkste concepten in de econometrie: modelleren, de modelleercyclus, regressie, lineaire en niet-lineaire modellen, modellen voor tijdreeks, cross-sectionele, binaire, duratie en multivariate data.
- 1.5 Weergeven van de belangrijkste concepten van de besliskunde: deterministische en stochastische optimalisatie modellen, optimalisatietechnieken en simulatietechnieken.
- 1.6 Weergeven van de belangrijkste concepten van methodologie en wijsbegeerte van het economisch denken.
- 1.7 Geavanceerde kennis van het toepassen of verbinden van econometrische of besliskundige concepten en methoden als in 1.4 en 1.5 op of met de economie als in 1.2.

#### 2 Vermogen tot analyseren en verklaren

Studenten analyseren en verklaren verschijnselen en problemen in de economie en in bedrijven met behulp van hun kennis van de theorieën en methodologie van de econometrie en besliskunde.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 2.1 Toepassen van econometrische en besliskundige concepten, theorieën, onderzoeksmethoden en – technieken op verschijnselen en problemen van (bedrijfs-)economische aard, met gebruikmaking van relevante academische literatuur.
- 2.2 Analyseren, verklaren en beoordelen van en adviseren over het gevoerde economische beleid van bedrijven, overheden en organisaties.
- 2.3 Analyseren en verklaren van de werking van de economie of delen ervan (financiële markten, macro-economische processen).
- 2.4 Analyseren, verklaren en beoordelen van en adviseren over actuele situaties vanuit de wijsbegeerte van het vakgebied.

### Toepassen kennis en inzicht

#### 3 Formulering van doelstelling en probleemstelling

Studenten formuleren een (bedrijfs-) economische, econometrische of besliskundige probleemstelling uitgaande van de relevante wetenschappelijke concepten en theorieën.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 3.1 Afbakenen en definiëren van een onderzoek op het terrein van de (bedrijfs-) economie, econometrie of besliskunde.
- 3.2 Concretiseren, formuleren en operationaliseren van onderzoeks vragen.

#### 4 Keuze van onderzoeksopzet

Studenten kiezen een onderzoeksopzet die aansluit bij hun vraagstelling.

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 4.1 Selecteren van een relevante kwantitatieve, en eventueel ook kwalitatieve, onderzoeks methode.



4.2 Modelleren: construeren van een geschikt model uit de wiskunde, statistiek, econometrie of besliskunde voor de oplossing van het probleem.

### 5 Keuze van onderzoeks methode

*Studenten kiezen één of meer geschikte methoden om gegevens te verzamelen en te analyseren.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

5.1 Kunnen hanteren en motiveren van gangbare econometrische en besliskundige technieken op data uit de praktijk van (financiële) markten, bedrijven, overheid en wetenschap.

5.2 Kunnen vergelijken van verschillende econometrische en besliskundige modellen en technieken op hun merites voor de onderliggende probleemstelling.

5.3 Efficiënt en effectief gebruikmaken van databanken voor het verzamelen van gegevens, met behulp van internet of bibliotheken.

### 6 Trekken van conclusies

*Studenten doen uitspraken over de initiële probleemstelling op basis van de gevonden resultaten.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

6.1 Analyseren van de verzamelde gegevens met behulp van econometrische en besliskundige technieken en het trekken van conclusies ten aanzien van de probleemstelling op basis van de analyse.

6.2 Reflectie op uitkomsten en conclusie in het licht van de sterke en zwakke punten van de toegepaste methoden.

6.3 Uitvoeren van de cyclus modelbouw en aanpassing van dat model op grond van verkregen uitkomsten.

### 7 Ontwerpen van beleidsadviezen

*Studenten doen voorstellen waarmee economische vraagstukken kunnen worden opgelost op basis van relevante concepten en theorieën uit het vakgebied van de econometrie en besliskunde.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

7.1 Op basis van onderzoeksresultaten beleidsadviezen formuleren, gericht op de oplossing van concrete (economische) vraagstukken van bedrijven en overheden.

7.2 Effectief rapporteren over het advies en de onderliggende motivatie, en het aangeven van onzekerheden en mogelijke knelpunten bij de tenuitvoerlegging hiervan.

### 8 Samenhang en interactie

*Studenten leggen verbanden tussen de verschillende vakken.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

8.1 Combineren van verschillende inzichten en technieken uit de econometrie, besliskunde en haar basisvakken.

8.2 Beoordelen van de kwaliteit van econometrische of besliskundige resultaten voor economische theorie en praktijk.

### Oordeelsvorming

### 9 Vermogen tot abstraheren

*Studenten selecteren relevante onderzoeks vragen en informatie uit een complexe samenhang en kunnen deze doorgronden binnen een gegeven context.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

9.1 Onderscheiden van hoofd- en bijzaken in een complexe context.

9.2 Presenteren en bediscussiëren van de primaire aspecten van een onderzoeksprobleem met behulp van een econometrisch of besliskundig model.

9.3 Abstract redeneren in een wiskundige of statistische context.

### 10 Analytische grondhouding

*Studenten trekken logische conclusies uit gegeven aannames.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:



- 10.1 Maken van logische gevolgtrekkingen uit abstracte en waarneembare feiten (deductie).
- 10.2 Trekken van empirische conclusies uit waargenomen data (inductie).
- 10.3 Herleiden van een beleidsprobleem tot een onderzoeksvraag.
- 10.4 Zelfstandig formuleren van econometrische en besliskundige modellen, analyse van hun relevante wiskundige en statistische eigenschappen.

## 11 Onderzoekende en ondernemende grondhouding

*Studenten baseren uitspraken over de werkelijkheid op betrouwbare gegevens.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 11.1 Formuleren van onderbouwde conclusies t.a.v. de vraagstelling op basis van de data en modellen.
- 11.2 Kunnen leggen van nieuwe verbanden.
- 11.3 Kunnen ontwikkelen, motiveren en toepassen van nieuwe methoden.

## 12 Interpretatiekaders

*Studenten gebruiken verscheidene gezichtspunten bij het doen van uitspraken over de werkelijkheid.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 12.1 Onderscheiden van relevante interpretatiekaders in een gegeven probleemsituatie.
- 12.2 Herinterpretieren van probleemsituaties door gebruik te maken van verschillende interpretatiekaders.

## Communicatie

### 13 Samenwerking

*Studenten werken professioneel en doelgericht samen in teams met erkenning van eenieders belang, positie en waarden.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 13.1 Samenwerken met medestudenten in taakgerichte groepen van verschillende structuur (mono- of multidisciplinair).
- 13.2 Samenwerken in projecten met mensen zonder achtergrond in econometrie en besliskunde.

### 14 Communicatie

*Studenten communiceren effectief schriftelijk en mondelijk met personen en groepen van uiteenlopende aard.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 14.1 Presenteren van onderzoek, onderzoeksresultaten en beleidsadviezen in zowel schriftelijke als mondelinge vorm.
- 14.2 Onderscheiden van hoofd- en bijzaken in de mondelinge en schriftelijke communicatie.
- 14.3 Consistent en overtuigend argumenteren.
- 14.4 Correct wiskundig formuleren.
- 14.5 Keuzes maken over de vorm en stijl van een presentatie, afhankelijk van de gelegenheid, het publiek en de doelstellingen.

## Leervaardigheden

### 15 Zelfsturing

*Studenten zijn verantwoordelijke, academisch opgeleide professionals die over de leervaardigheden beschikken om een vervolgopleiding aan te gaan waarvoor een hoge mate van autonomie nodig is.*

Studenten zijn aan het einde van de bachelorfase in staat tot het:

- 15.1 Innemen en verantwoorden van de eigen positie t.a.v. economische ontwikkelingen en onderzoek daarnaar.
- 15.2 Nemen van verantwoordelijkheid voor het eigen leerproces.