

**Study programme section of the Students' Charter  
with the 2022 – 2023 Teaching and Examination Regulations  
of the Bachelor's programme**

**Industrial Engineering and Management ( Bacheloropleiding Technische  
Bedrijfskunde 34421, full-time study programme) of the  
Fontys College of Business Management, Education and Technique (48) in Eindhoven**

The study programme's section of the Students' Charter was adopted by the institute's director on 31 May 2022, after obtaining the IPC's consent on 30 May 2022 and the PC consent on 17 May 2022.

The teaching and examination regulations of the study programme expand on the general section of the teaching and examination regulations of Fontys Bachelor's programmes.

This general section for the 2022 – 2023 academic year was established by the Executive Board on 14 December 2021, following the consent of the students' section of the CPC, which was given on 7 February 2022.

*Key*

**Arial Black**      **text specific for IEM**

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## A – Teaching and Examination Regulations

### Section 1 General

#### Article 1 Definitions

Academic year	The period from 1 September up to and including 31 August of the following year.
Advice regarding the continuation of studies	Advice given to students at the end of the first year of the foundation phase of a Bachelor's programme regarding the continuation of their studies either with the programme or elsewhere. This advice may entail a binding rejection (binding negative study advice).
Assessment	Generic term for tests aimed at assessing a student's competencies in a professional situation that is as authentic and realistic as possible.
Assessor	An examiner that grades the student's progress in acquiring the required competencies.
CAA	Centre for Administrative Activities. The CAA is the internal partner within Fontys of the representative and participatory bodies and their discussion partners with respect to optimising how these bodies function.
Certificate	The certificate as referred to in Section 7.11 of the Dutch Higher Education and Research Act ( <i>Wet op het Hoger Onderwijs en Wetenschappelijk Onderwijs, WHW</i> ).
CPC	Central Participation Council
Cohort	The group of students who are enrolled for the first time in the foundation year of a study programme on the same reference date to which the prevailing Teaching and Examination Regulations (TER) apply. For students who enrol in a higher year, cohort membership is determined on an individual basis.
Competency	A cluster of related knowledge, skills and attitudes that influences a substantial part of a person's job, is related to the performance of the job, can be measured and tested against accepted standards and can be improved through training and development.
Component test	If an interim examination consists of several tests, each of those tests is referred to as a component test.
Coordinating institute	The coordinating institute is the Fontys Institute which bears final responsibility for the development, implementation, assessment and improvement of a minor programme.
Credit	One credit equals 28 standard study-load hours. Students are awarded credits on passing the interim examination of a unit of study. The international term for credits is ECTS credits (EC's).
Education components CROHO	The courses offered to students to help their learning process. Central Register of Higher Education Study Programmes, which is a register of all study programmes. Students that pass the interim examinations of a study programme registered in CROHO are entitled to an official higher professional education certificate with the associated degree (Associate degree, Bachelor or Master). The CROHO will be replaced by the RIO in 2022.
Deficiency	Any required prior qualification(s) a student lacks.
Diploma supplement	Document drawn up in accordance with a European format that is added to the certificate and states the nature, level, context, content and status of the study programme.
Dual-study programme	A dual-study programme is organised in such a way that education is alternated with one or more periods of professional practice related to the study programme. The study programme therefore consists of an educational segment and a practical segment, both of which are integral parts of the study programme.
DUO	Short for Dienst Uitvoering Onderwijs, a government agency charged with implementing education legislation and regulations.
Diploma with subject combination	Former senior general secondary education ( <i>HAVO</i> ) or pre-university education ( <i>VWO</i> ) diploma based on subject combinations. These diplomas were issued before the <i>HAVO</i> and <i>VWO</i> profiles were introduced (from 1998).
ECTS	European Credit Transfer System. The system that is used to express credits in order to facilitate international comparison. See also: credits.
Elite athletes scheme	Scheme for elite athletes that specifies which students are eligible to benefit from it and the facilities that they may use under it.

EVC (RPL)	<i>Erkenning van eerder Verworven Competenties</i> (Recognition of Prior Learning).
Examination	Assessment administered by the Examination Board to determine whether students have successfully completed the educational components of a study programme or the foundation-year phase. The final examination may also include a supplementary assessment conducted by the Examination Board.
Examination Appeals Board	The Board as referred to in Sections 7.60 up to and including 7.63 of the WHW and Articles 45 and 46 of the Students' Charter. The organisation, duties and powers of the Board are laid down in the Rules of Procedure adopted by the Examination Appeals Board and approved by the Executive Board.
Examination Board Examiner	The board of persons referred to in Section 7.12 of the WHW. Member of staff or external expert not employed by the institution who has been designated by the Examination Board to administer examinations and assess the results thereof.
Executive Board	The administrative body of Fontys University of Applied Sciences, as described in the articles of association and the WHW.
Executive institute Exemption	A Fontys institute responsible for the execution of a minor. Full or partial exemption from meeting enrolment and/or admission conditions and/or sitting interim examinations.
Exit qualifications Fontys minor	Qualifications students must have on completing the study programme. A minor open to all Fontys students, so long as they meet any admission criteria for the minor, with a focus on overarching and distinctive themes.
Foundation year	First phase in a Bachelor's programme.
Fraud	Any act (including plagiarism ) or omission that either partially or fully impairs the correct assessment of a person's knowledge, understanding, skills, competencies, professional attitude, powers of reflection etc.
Full-time study programme	A full-time study programme is a study programme whose structure is such that students are assumed not to participate in any activities other than academic activities.
Hardship clause	A provision in a law or regulation that makes it possible to deviate from regulatory provisions in favour of the student or external student.
He/him	He/him is taken here to refer to men, women and individuals who do not identify as either of these options.
IELTS	International English Language Teaching System, a tool used to determine a student's command of the English language.
Institute	The operational unit at Fontys that is, in particular, responsible for organising Fontys's core competencies and that executes the primary processes, i.e. the statutory tasks as referred to in Section 1.3, paragraphs 3 and 1.9(1) of the WHW.
Institute Director	The staff member charged with running a Fontys institute.
Institution	The Fontys Universities of Applied Sciences.
Intake assessment	Portfolio assessment conducted at the student's request to validate previous learning experiences prior to enrolment in the study programme. A fee covering the costs is charged for an intake assessment.
Intake interview	Interview conducted at the student's request prior to the start of the study programme if the student believes that he has competencies acquired previously. An intake interview comprises a general assessment from which no rights can be derived by a student.
Interim examination	An examination of the knowledge, understanding, skills and/or competencies of a student required to conclude a unit of study, including an assessment of the results of such an examination ( <i>Section 7.10(1) of the WHW</i> ). An interim examination may consist of one or more component tests.
IPC	Institute Participation Council
Main subject	A specific definition of the curriculum within a programme, which begins immediately from year 1 or following the foundation year. (
Major	<i>That part of the Bachelor's programme with a study load of 210 credits that contributes to the competencies associated with the programme and that is directly related to the study programme(s)'s registration in the RIO.</i>
Minor	<i>Programme of optional subjects within a Bachelor's programme with a study load of 30 credits that contributes to generic or specific competencies.</i>
Minor regulations	Regulations that describe the content, the education components, the testing and the completion of a minor. The regulations of all minors offered by Fontys can be found on the Fontys website ( <a href="http://www.fontys.nl/minors">www.fontys.nl/minors</a> ). The regulations of

	the minors associated with a particular study programme have been included as an appendix of the study programme's TER.
Nt2 diploma	Diploma of the Nt2 official state examination in Dutch as a second language, of which programme II is considered to be the guideline for admittance to higher education.
Occupational requirements	The legal requirements to which the practice of a particular profession is subject. A study programme aimed at such an occupation will prepare students to meet the relevant requirements. ( <i>Section 7.6 of the WHW</i> ).
Part-time study programme	A part-time study programme is a study programme whose structure is such that the student is able to participate in supplementary activities, either work-related or educational, alongside the study programme.
Portfolio	A collection of evidence, digital or otherwise, with which students can demonstrate that they master the competencies of a particular study programme.
Post-foundation year phase	Second phase of a Bachelor's programme.
Principle	All study programmes offered are based on one of the following principles: non-denominational private education (NPE), Roman Catholic (RC), Protestant Christian (PC) or a combination of non-denominational private education, Roman Catholic and Protestant Christian (NPE, RC, PC).
Profiling Fund Board	Board charged by the Executive Board with implementing the Profiling Fund scheme, formerly known as the FSS Board.
Profiling Fund Scheme	Scheme for the granting of support to students in the form of graduate funding, committee member grants or attendance fee from the profiling fund, now known as the <a href="#">Profiling Fund Scheme</a>
PC	Opleidingscommissie (Programme Committee, PC), a committee established for a particular study programme of an institute referred to in Section 10.3c of the Act (see the <a href="#">Regulations on the Participation Councils and Degree PC's</a> ).
RIO	The register ( <i>Registratie Instellingen en Opleidingen</i> ) that will replace existing registers such as the CROHO and the BRIN.
Tailored programme	Special programme which differs from the standard programme.
Teaching period	Period in the academic year during which education components are organised. A teaching period is referred to as a study quarter in the Fontys annual calendar.
TER	Teaching and examination regulations. The TER consists of a general section for all study programmes offered by the Fontys Universities of Applied Sciences as well as information specific to individual study programmes. The TER forms a part of the study programme section of the Students' Charter.
Test	Activity used to assess whether a student has certain knowledge, insight, skills and/or competencies.
Student	A person who is enrolled in the institution, as referred to in Sections 7.32 up to and including 7.34 of the WHW.
Student counsellor	Staff member appointed by the Executive Board who is responsible for looking after the students' interests, providing assistance when problems occur and providing information and advice. The student counsellor is part of the Student Facilities Service ( <i>Dienst Studentenvoorzieningen</i> ).
Study Career Centre	Service provided by the Student Facilities Service ( <i>Dienst Studentenvoorzieningen</i> ) to help students with issues involving admission, transfer to another study programme/institute or the termination of their studies.
Students' Charter	The <a href="#">charter</a> containing the rights and obligations of students, divided into an institution-specific section and a study programme-specific section.
Student entrepreneur scheme	<a href="#">Scheme</a> which is intended to help Fontys students who are deemed student entrepreneurs to combine entrepreneurship and study.
Student coach <sup>1</sup>	Coach who provides guidance on issues relating to student progress, including those that stimulate a student to develop a personal and professional identity, focusing on a student's talents and personal leadership qualities.
Student coaching	System of guidance that focuses on the development of the individual student. It stimulates students to reflect on their own development as future practitioners of the profession and to take responsibility for their own development.

<sup>1</sup> Within IEM the 'student coach' may be referred to as 'personal mentor'.

Study check advice	Advice provided to a prospective student who has participated in the study check with regard to his choice of Bachelor's.
Study check	The activity offered by Fontys whereby the prospective student is given advice with respect to his choice of study programme. The study check consists of at least two components: a digital questionnaire and a consultation to discuss the results of the questionnaire.
Study load	The standardised time investment expressed in units of 28 study load hours related to a study programme.
Study programme	A coherent totality of education components aimed at achieving the well-defined objectives in the area of knowledge, understanding and skills which the person completing the study programme should possess. Every study programme is recorded in the RIO.
Study programme minor	A minor which can only be taken by students from a specific domain or study programme and which highlights one particular theme.
Study programme profile	The entire set of final qualifications for which the study programme provides training or, in other words, the professional competencies expected of a beginning professional.
Unit of study	Part of a study programme that is concluded with an interim examination as referred to in Section 7.3(2) of the WHW or an additional assessment carried out by the Examination Board, as referred to in Section 7.10(2) of the WHW. Units of study may relate to the assessment of one or more competencies, a component of competencies (knowledge, understanding, skills, attitude) or a combination of competencies or of a minor. Students are awarded the relevant credits on passing the interim examination for the unit of study.
WEB	Adult and Vocational Education Act ( <i>Wet Educatie en Beroepsonderwijs</i> , WEB; Bulletin of Acts and Decrees 507, 1995, and later supplements and amendments).
WHW	The Dutch Higher Education and Research Act ( <i>Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek</i> , WHW; Bulletin of Acts and Decrees 593, 1992, and later supplements and amendments).

*Note*

*Pursuant to the letter from the Netherlands Association of Universities of Applied Sciences dated 29 June 2018 and in keeping with the decision taken by the Executive Board on 29 October 2019, Fontys will now exclusively use the term 'Main subject'.)*

## Section 2 Admission to a Bachelor's programme

### Article 2 Required prior qualifications

1. Only prospective students with diplomas awarded on completing pre-university education (*VWO*) or senior general secondary education (*HAVO*), with profiles, or senior vocational education (*MBO*) in middle management as well as prospective students that have completed specialist training or a vocational training programme designated by a ministerial regulation may be admitted to a Bachelor's programme (*Section 7.24 of the WHW*). Additional conditions for admission apply if a shortened programme is offered. Those conditions are set out in Article 7.
2. Prospective students with a certificate awarded on completing a foundation year or passing the final examination of a higher professional education (*HBO*) or academic higher education (*WO*) study programme are also entitled to be admitted to a Bachelor's programme at a university of applied sciences. Prospective students must, however, also meet any applicable requirements regarding their previous qualifications (paragraph 4) and any other additional requirements imposed (paragraph 5). (*Section 7.28 of the WHW*).
3. All citizens that have access to education offered by research universities or universities of applied sciences in a country that has ratified the Convention on the Recognition of Qualifications concerning Higher Education in the European Region may also be admitted to a Bachelor's programme, without prejudice to the provisions in paragraphs 4 and 5 of this article and the provisions of Article 3.
4. **The previous qualifications of prospective students seeking enrolment in an Associate Degree and Bachelor's programme are subject to the following additional requirements in respect of HAVO and/or VWO diplomas, MBO diplomas and the teacher training programme for primary education.**
  - a. **The following additional educational entry requirements apply to prospective students seeking admission on the basis of a HAVO or VWO diploma (Section 7.25(1) of the WHW).**

**Prospective students who do not have the required subject cluster or did not take the right subject may be admitted provided an assessment conducted before the commencement of the study programme demonstrates that, in terms of the subject matter, the prospective student concerned meets similar requirements. (Section 7.25(5) of the WHW.)**

**The requirements to be met by the prospective student are as follows:**

**Study programme specific:**

**Based on a Secondary Education (VO) profile:**

<i>Study programme</i>	<i>VWO</i>				<i>HAVO</i>			
	<i>C&amp;M</i>	<i>E&amp;M</i>	<i>N&amp;G</i>	<i>N&amp;T</i>	<i>C&amp;M</i>	<i>E&amp;M</i>	<i>N&amp;G</i>	<i>N&amp;T</i>
<i>IEM</i>	<i>+ (WiA orB)</i>	<i>+</i>	<i>+</i>	<i>+</i>	<i>+ (WiAorB)</i>	<i>+</i>	<i>+</i>	<i>+</i>

**b. Prospective students who hold an MBO level 4 diploma have the right to admission if the diploma is in a related sector (Section 7.24(3) of the WHW). Prospective students who do not hold an MBO level 4 diploma in a related sector may be admitted if it can be established by means of an assessment conducted before the study programme commences that they have satisfied requirements that are commensurate in terms of content (Section 7.25(5) of the WHW).**

**Domains that are deemed not to be related are:**

- **MBO domain Trade and Entrepreneurship for the HBO sector Technology**
- **MBO domain Economics and Administration for the HBO sector Technology.**

5. Enrolment in a Bachelor's programme is subjected to the following additional requirements (Section 7.26 and 7.26a of the WHW):

**There are no additional requirements**

6. Prospective students who are 21 or older at the start of the study programme and do not meet the requirements regarding their previous qualifications and have not been exempted from the requirements may still be eligible for exemption after taking an entrance examination. (Also see Article 3(5).) (Section 7.29 of the WHW.)

The aim of this examination is to determine the prospective student's suitability to take part in the Bachelor's programme as well as the student's command of the Dutch language or the English language, if the prospective student opts for an English-taught study programme.

The entrance examination consists of two parts.

An intellectual abilities test to assess if the prospective student has the required working skills and intellectual abilities at higher professional education (HBO) level. A stanine total score of 4 or higher is required to pass this part of the test.

- A language test to assess the prospective student's command of Dutch or English compared to the required 3F (B2) level.

*Prospective students taking the entrance examination for students aged 21 or over (hereinafter the '21+ entrance examination') for a Dutch-taught study programme may request an exemption for the Dutch language test if they have already obtained a recognised Nt2 certificate or a certificate for Dutch language proficiency at the MBO 4, HAVO or VWO level granted by a prior degree programme.*

*Prospective students who register for the 21+ entrance examination for an English-taught programme must provide a TOEFL, IELTS or other accepted<sup>2</sup> certificate.*

Prospective students will be notified of the results of the entrance examination within two weeks.

If a prospective student fails the 21+ entrance examination, they can retake it after one year.

The result of a passed 21+ entrance examination will remain valid for five years.

Prospective students will not be exempted from taking the 21+ entrance examination on the basis of any 21+ entrance examinations or intellectual abilities tests administered elsewhere.

7. The Executive Board has declared that 'old' HAVO and VWO diplomas with subject combinations chosen by the pupil are at least equivalent to the 'new' diplomas with subject cluster requirements. Consequently, prospective students holding these types of diploma may be admitted. Prospective students must, however, meet any requirements regarding previous qualifications (paragraph 4) and any further additional requirements (paragraph 5). (Section 7.28 of the WHW.)

**The institute director has declared that the 'old' HAVO and VWO diplomas with old profiles are**

<sup>2</sup> IELTS	6.0
TOEFL Paper	550
TOEFL Internet	80
TOEIC	670

(as far as both 'Speaking and writing' as 'Listening and Reading' are passed.)

Cambridge ESOL FCE-C (scale 169 – 172), FCE-B (scale 173-175)

**equivalent to 'new' diplomas with profile requirements. Consequently, prospective students holding these types of diploma may be admitted. Prospective students must, however, meet any requirements regarding previous qualifications (paragraph 4) and any further additional requirements (paragraph 5). (Section 7.28 of the WHW.)**

8. Where a prospective student applies for admission to a study programme based on a diploma other than one of the diplomas referred to above, the institute director will decide whether that diploma is equivalent and if it grants access to the study programme. Prospective students must, however, meet any requirements regarding previous qualifications (paragraph 4) and any further additional requirements (paragraph 5). (*Section 7.28 of the WHW.*)
9. **Prospective students who are admitted by virtue of a diploma as referred to in paragraphs 2, 7 or 8 of this article will be subject to an additional assessment to determine whether they meet the knowledge and skills requirements as referred to in paragraph 4 and 5 of this article. (Section 7.28 of the WHW.)**  
**Prospective students must meet the requirements of this assessment prior to enrolment.**
10. Admission to the study programme is **not subject to** an admission quota in accordance with Sections 7.53, 7.54, 7.56a and 7.57a of the WHW.

#### **Article 2a Study choice check and study choice advice**

1. The study choice check consists of at least the completion of a digital questionnaire and a contact moment with the study programme.
2. Within 4 weeks following registration, the prospective student will receive a link to the digital questionnaire. Within 4 weeks following completion of the questionnaire, the prospective student will receive an invitation to the contact moment with the study programme.
3. The digital questionnaire can be completed in the period between **15 January and 15 September. For students who start their programme in February the questionnaire can be completed in the period between 15 August to 15 February of the following year.**
4. The contact moments with the study programmes are planned in the period between **1 February and 1 September. For those students who start in February this will be in January.**
5. **The contact moment will consist of a group assignment, preceded by an individual interview. For students who live faraway an online interview may be arranged.**
6. The study choice advice will be sent to the prospective student by e-mail within ten working days of the contact moment.
7. The study choice advice is non-binding for prospective students who apply by no later than 1 May. Prospective students who apply after 1 May will not be permitted to enrol, except in the case of a situation as referred to in Article 2(2) or in the event of exceptional circumstances as set out in Article 3(3), under a through d of the Study Choice Check Rules.
8. The Study Choice Check Rules determine the categories of prospective students for whom the study choice advice is not obligatory.

#### **Article 3 Requirements regarding foreign diplomas/prospective international students**

1. Holders of a foreign diploma may not sit tests in the foundation year of a Dutch-taught study programme before having demonstrated to the Examination Board to have an adequate command of the Dutch language. (*Section 7.28 of the WHW.*)  
**N/A within the study programme**
2. The institute director may also decide that a prospective student with a foreign diploma may be admitted after the prospective student has demonstrated that he has an adequate command of the Dutch language. (*Section 7.28 of the WHW.*)  
**N/A within the study programme**
3. Prospective students with a foreign diploma seeking admittance by virtue of an entrance examination as referred to in Article 2, paragraph 6, must be at least 21 years of age.
4. Foreign prospective students from outside the EU who are 18 years of age or older on the date of their first enrolment must have a valid residence permit. (*Section 7.32 of the WHW.*)
5. Foreign students with a residence permit are required to earn at least 50% of the available credits each year. The IND will be informed if the student fails to meet this requirement, unless there are special circumstances due to which the student was unable to meet this requirement. Such a notification based on the same special circumstances may be withheld once during the course of each study programme.

6. For international<sup>3</sup> students, the following language requirement applies for admission to an English-language programme.
- an average IELTS score of 6.0, for which the student must have a score of 6.0 for at least three components and may have a score below 6.0 for no more than one of the four components, provided this score is at least a 5.5.

A previously completed language test, with the exception of Cambridge, may be no more than two years old at the time the study commences, which can be either on 1 September or on 1 February. Exemption may be granted for this requirement if the international student can submit a diploma from prior education that was obtained in a country in which English is the official language of instruction. If the diploma was granted more than two years ago, the student will be asked to demonstrate their language skills again, unless English is the only language of instruction in the country where the student obtained the diploma.

Test	Overall Score	Component	No more than 1 deviating component
<b>IELTS</b>	≥ 6,0		
• IELTS reading		≥ 6,0	≥ 5,5
• IELTS listening		≥ 6,0	≥ 5,5
• IELTS speaking		≥ 6,0	≥ 5,5
• IELTS writing		≥ 6,0	≥ 5,5
<b>Cambridge</b>	≥ 169		
• Cambridge reading		≥ 169	160 t/m 168
• Cambridge listening		≥ 169	160 t/m 168
• Cambridge speaking		≥ 169	160 t/m 168
• Cambridge writing		≥ 169	160 t/m 168
<b>TOEFL</b>	≥ 72 <sup>4</sup>		
• TOEFL reading		≥ 18	
• TOEFL listening		≥ 17	
• TOEFL speaking		≥ 20	
• TOEFL writing		≥ 17	
<b>TOEIC speaking and writing</b>	≥ 310		
• TOEIC speaking		≥ 160	-
• TOEIC writing		≥ 150	-
<b>TOEIC reading and listening</b>	≥ 785		
• TOEIC reading		≥ 385	-
• TOEIC listening		≥ 400	-

Please note: the TOEFL and TOEIC programmes do not have a deviating component, as the lower limit applied in the 'Test Component' table is already the B2 lower limit as well.

#### Article 4 Professional activity requirements

The professional practice environment is not subject to any requirements.

<sup>3</sup> According to the Code of Conduct International Student, the term 'international student' refers to a 'student with a foreign nationality who, in case of a third-country national on the basis of a residence permit granted to this effect, desires to continue, continues or has continued his/her full time education at a higher education institution in the Netherlands'.

<sup>4</sup> In the draft of this code, which is valid from September 1, 2022, a score of at least 60 must be achieved.

## Section 3 Intake interview, exemptions, short track and tailored study programmes

### Article 5 Intake interview

1. Students entering a study programme may be offered an intake interview if they have competencies previously acquired elsewhere. Students can include the evidence of the competencies previously acquired elsewhere in their portfolios which are to be evaluated in an assessment or may use this evidence to substantiate a request for exemption before the Examination Board.
2. Students who re-enrol after an interruption in a study programme in which they were previously enrolled will be required to take an intake interview to determine which part of the study programme still has to be completed. No intake interview is needed if agreements regarding re-enrolment in the study programme were already made with the Executive Board at the time that the student interrupted his study. If a student enters a study programme during the foundation year, agreements will be made on the period of time the student will be granted before the advice regarding the continuation of studies will be issued.
3. A study programme will be drawn up based on the assessment of the competencies previously acquired and will be submitted to the Examination Board for approval.

### Article 6 Exemptions

1. The institute director can exempt a student from the foundation year examination if the student holds a diploma, Dutch or foreign, which is at least equivalent. (*Section 7.30 of the WHW.*)
2. Students who believe they are eligible for an exemption must submit an application to that end to the Examination Board. The Examination Board may grant an exemption from one or more interim examinations on the grounds of a review of an assessment or the holding of a diploma, certificate, accreditation of prior learning or similar document, such as proof of results achieved in a study programme taken at a research university or university of applied sciences and/or proof of administrative activities, with which students can show that they have already met the requirements of the test in question. Exemptions are recorded in the study progress system. The period of validity of the exemption is stated in the exemption decision.
3. The Examination Board can grant an exemption from a minor based on the certificate of an accredited Associate degree, Bachelor's or Master's programme or on a document proving that the student completed a minor in an accredited Bachelor's or Master's programme, so long as this minor does not overlap substantially with the student's current Bachelor's programme. Exemptions based on study results from an accredited Associate degree, Bachelor's or Master's programme can only be granted if the student has documented proof of obtaining at least 30 credits in this study programme (for a Bachelor's programme, this requirement refers to the second and third year, or second year if it concerns an Associate Degree programme) and if these results do not overlap substantially with the student's current Bachelor's programme.  
A student who has taken part in the Fontys Empower programme and has successfully completed all components of that programme may, on that basis, may be granted an exemption for a minor provided the student submits a request to that effect and this possibility has been set out in Article 16(5).

### Article 7 Short-track/tailored study programmes

1. Students who believe they are able to proceed with and/or complete their study programmes at an accelerated pace may submit an application requesting such to the Examination Board. The student coach's advice must be enclosed with the application. The organisation of the study programme must be able to accommodate the short-track option.
2. *A shortened programme can be offered to students transferring from a related MBO programme.*  
**N/A within the study programme**
3. *Incoming students with a VWO (pre-university education) diploma may qualify for a shortened programme.*  
**N/A within the study programme**
4. *If tailored programmes are offered to students who, following an intake interview or intake assessment, are able to enter the study programme via accelerated tracks, these tracks are to be specified here.*  
**N/A within the study programme**

## Section 4 Facilities with reference to student coaching, language, functional disability,

## administrative activities, Elite athletes scheme, student entrepreneurship

### Article 8 Student coaching

1. Every student is coached by a student coach<sup>5</sup>.
2. In consultation with the student coach, the student decides how best to develop and how to shape the learning process.
3. The student consults with the student coach on the progress of the learning process.
4. The student coach conducts support and orientation interviews with the student in the foundation year. Reports are drawn up of these interviews, copies of which are given to the student. The student must sign these reports to indicate his agreement or, if applicable, with the note 'reviewed and not approved'.
5. Students may submit a request to the institute director to be assigned a different student coach if they can give arguments for this.

### Article 9 Facilities with reference for language

1. Students enrolled in their foundation year whose mother tongue is not Dutch can apply to the Examination Board to be allowed extra time when they sit tests in the first year of the foundation phase. Extra time to sit tests will only be granted to students who can prove that they use facilities to improve their command of the Dutch language.
2. For Dutch students, extra support will be arranged with regard to promoting Dutch language proficiency for those students who are in need of such support. The following facilities will be provided.
3. **For Dutch students who are enrolled in an English language programme, the following facilities are offered: individual tutoring.**

### Article 10 Special facilities for students with a functional disability

1. Students with a functional disability are legally entitled to effective adjustments, unless such adjustments would burden the institution disproportionately. (*Section 7.13 of the WHW, Section 2a of the Equal Treatment of Disabled and Chronically Ill People Act.*) See also <https://fontys.nl/fontyshelpt/Studentenbegeleiding/Bijzondere-omstandigheden.htm>
2. These adjusted facilities must be aimed at the removal or restriction of any obstacles and encourage the independence and full participation of the student as much as possible. The adjusted facilities may relate to the study programme (including internships), the timetables, and type of study programme, the tests and educational tools.
3. A student who seeks to have adjusted facilities must submit a written and substantiated application in good time to the Examination Board. If necessary, the Examination Board will seek an expert's advice (such as a student counsellor) before taking a decision. If the Examination Board deems it necessary before taking a decision, it may confidentially inspect the medical certificate that may be available with the student counsellor, unless the student objects. The Examination Board must decide within four working weeks after receipt of the application, unless it requires further inquiry, in which case the student will be informed as to when more clarity can be given with respect to his application.
4. In the case of a protracted or chronic disability, such an application will only have to be made once for the entire study programme; in all other cases once per testing period or academic year. In its decision to grant the facilities, the Examination Board may also rule that these will apply for the entire duration of the student's study or that the student is to consult with his student coach annually to discuss whether the facilities are still adequate.
5. At the beginning of the academic year the institute will inform students regarding the possibilities for special facilities. Students will be informed of their right to consult a student counsellor.

### Article 11 Students with board memberships

1. Students can include any board memberships as part of their portfolios. In order to do so, they must describe, in consultation with their student coach, how the board membership can contribute to the acquisition of one or more competencies of their study programme.
2. Board memberships for the DPC, IPC, CPC, or for study associations, student associations and as members of committees at Fontys can be listed on the diploma supplement. The student must request the listing at least **four weeks** prior to the graduation ceremony via the IEM Service Desk, [tbafstuderen@fontys.nl](mailto:tbafstuderen@fontys.nl).

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<sup>5</sup> Note that within IEM the 'student coach' is referred to as 'personal mentor'.

At the request of the student's study programme, the Centre for Administrative Activities (CAA) can confirm that the student has been an active board member of a CPC. In the case of board memberships of a PC or IPC, the study programme can request confirmation from the relevant IPC or PC.

3. Students who believe that their board memberships demonstrate that they have the knowledge, understanding and/or skills etc. that are assessed in particular tests may apply for an exemption from such tests from the Examination Board.
4. Facilitation for board memberships is laid down in the Fontys Regulations on the Participation councils and degree programme committees, the Regulations on board membership grants and the Remuneration scheme for committees and steering groups.

#### Article 12 Elite Athletes scheme - Student entrepreneurship

1. Students who have been granted an Elite Athletes or Talent status are entitled to facilities from the Elite Athletes Scheme. Facilities regarding the adjustment of tests or test timetables, an adjusted arrangement regarding compulsory attendance, working in groups and an adjusted internship must be sought from **the Examination Board and reported to the personal mentor**. Advice regarding the continuation of studies may be deferred for students with an Elite Athlete status (see Article 32).
2. Students who are eligible for the Student Entrepreneurship Scheme may apply to the Examination Board, among others, for facilities regarding the adjustment of tests or test timetables, an adjusted arrangement regarding compulsory attendance for education components, working in groups and an adjusted internship. These facilities should be sought from **the Examination Board and reported to the personal mentor**. Advice regarding the continuation of studies may be deferred for students with entrepreneur status (see Article 32).

#### Section 5 Study programme content

##### Article 13 Study programme profile – main subjects/differentiations – occupational requirements

1. **The study programme is based on a study programme profile. The exit qualifications of the study programme are described in the study programme profile. The study programme profile can be found in Annex 4.**  
**At the end of the study programme, the student will be expected to command the competencies expected of a newly qualified professional in the field. During the course of the study programme, the student will be taught the required competencies and the student's command of them will be assessed. The professional requirements the student must command are described according to the competencies of the IEM study programme.**
2. **The study programme has the following main subjects *Bedrijfsmanagement MKB (Dutch studyprogramme)*, *Technische Bedrijfskunde (TB) (Dutch studyprogramme)* and *Industrial Engineering and Management (IEM) (English studyprogramme)* of Fontys Hogeschool *Bedrijfsmanagement, Educatie en Techniek*.**
3. **The principle of the study programme is mentioned in the Register of Study Programmes.**
4. **The study programme does not impose the following/any specific occupational requirements.**

##### Article 14 Study programme layout

1. Each Bachelor's programme has a foundation year phase with a study load of 60 credits, which is concluded with the foundation year examination. The function of the foundation year is to orientate the student, allowing him or her to make suitable choices.
2. A Bachelor's programme has a study load of 240 credits with a nominal study load of 60 credits per academic year and consists of a major and a minor. **The major has a study load of 210 credits. The minor has a study load of 30 credits.**

##### Article 15 Overview of units of study and credits

1. Every study programme consists of a coherent set of units of study, which are components of a study programme concluded with an interim examination. Units of study cannot exceed 30 credits.
2. Only whole credits are awarded for units of study. In the overview included in Annexes 3 and 5 you will find a distribution of the credits.
3. **The programme will be offered in the English language.**

##### Article 16 Content of minors and other special programmes

1. **Students are not restricted in their choice of a minor, whether the minor is a minor specific to a study programme or one offered across Fontys, or an external minor, provided there is no overlap with the major programme (see also paragraph 2).**

**The study programme offers the following study minor:**

- **Operational Excellence (see Annex 2)**

**External minors for which the Examination Boards always grants permission are (among others):**

- **Pre-master programme in order to be admitted to TU/e**
- **Pre-master programme in order to be admitted to UvT**

**The following minors cannot be chosen because they overlap with the major:**

- **See overview on portal on this [minorlist](#).**

2. Students who want to take a minor abroad or an external minor must seek the Examination Board's permission regarding their personal choices with respect to the minor prior to its start. Participation in a minor requires students to have passed the foundation year examination, unless the Examination Board grants them permission to take the minor without fulfilling this requirement. The minor must be taken in the third year of study.
3. Enrolment in a minor must be done before the start date as stated on the [Fontys minor portal](#) or in the minor regulations.
4. Students can take a minor on top of the regular study programme of 240 credits. This is subject to the following conditions:
  - **For the individual components in the second year of the studyprogramme the student achieved an average score of 8 (eight) or higher and none of the grades of these components is lower than grade 7 (seven) or the student awaits an 'open study period' due to special circumstances for which following a minor can be a good alternative and;**
  - **In the 'open study period', the student has no outstanding obligations to be able to meet a threshold and;**
  - **The student provides a good motivation for the choice of the extra minor.**

**A request to be allowed to follow an extra minor is submitted to the Examination Board. With this request, the student must send a positive advice from the management of the studyprogramme.**

A minor that has been passed will be mentioned on the diploma supplement.

5. It is not possible to obtain an exemption from the minor on the grounds of the Fontys Empower reorientation programme because of overlap with the major.

## **Article 17 Education components - learning environment**

1. Annex 3 presents an overview of the education components that are part of the study programme.
2. The education components of the minors are described in the minor regulations. The regulations governing the minors offered across Fontys can be found at [www.fontys.nl/minors](http://www.fontys.nl/minors). The regulations governing minors specific to study programmes are included as an appendix to this TER.
3. Any entry requirements a student must meet before participating in an education component are stated in the overview as referred to in paragraph 1. These entry requirements, also named 'thresholds' are described in Chapter 4 of Annex 1 of this TER. Students who have already incurred study delay and foresee that they will not meet the threshold to be able to enroll in the study program 13/14, can submit a request to the Examination Board to offer them early testing opportunities for those courses from study year 2 that are not in the current semester offered regularly. With this request, the student must send a positive advice from the SLB2 team. The Examination Board decides whether this request can be honoured, with conditions possibly being set. The further elaboration of these regulations can be found in Chapter 2 of Annex 1 of this TER.
4. Participation in education components in the post-foundation year phase is allowed after passing the foundation year examination. The Examination Board may grant permission to a student who has not passed the foundation year examination to participate in education components in the post-foundation year phase. (*Section 7.30 of the WHW.*)
5. **For a number of learning arrangements, the student must register in advance. This concerns the internship project and the learning arrangement 13/14.**  
**If a student has to register for an internship or tutorial/workshop, etc. within a learning arrangement, the enrolment procedure can be found in the study manual that is published in Canvas.**
6. **The timetable is announced in Xedule no later than three weeks prior to the start of classes.**
7. Students who have registered for an education component must ensure that they meet the entry requirements of that component. The overview in Article 17, paragraph 1, indicates the education components to which requirements apply for participation as well as the nature of these requirements. If the requirements concern compulsory attendance, students who are eligible for the Elite athletes scheme or the [Student entrepreneur scheme](#) can apply to meet this requirement in a parallel group or for exemption from this obligation (see also Article 12).

## Article 18 - Evaluation of teaching

**The teaching provided during the study programme is evaluated by quantitative and qualitative evaluations by students at the end of each learning arrangement.**

**The education evaluations and actions to improve that result are under the responsibility of the coordinators fed back to teachers and students.**

## Section 6 Tests, *evidence*, assessment and study progress

### Article 19 Types of tests - evidence

1. **A test may be an exam, a task or an assessment.**
2. Tests are conducted in writing or orally or in a fashion that combines both writing and oral delivery (e.g. product and presentation/interview).
3. An oral examination, including an assessment, is conducted by at least two examiners. A report must always be drawn up of an oral test on a specially designed evaluation form an assessment of the quality of the evaluation afterwards afterwards. A test may be conducted by a single examiner only following the approval of the Examination Board and provided the student does not object. An oral test is held in public. Interested parties who wish to attend an oral test must submit a request to that effect to the examiner(s) at least two weeks before the test is held. The examiner must inform the student who is taking the test. If the student objects, the request to attend the oral test will in any event be rejected. Any rejection by the examiner will be substantiated. When the Examination Board offers students the possibility to sit an additional oral test by way of replacement of a regular test, it will always be conducted and assessed by two examiners.
4. **If a test consists of an assessment of freely-chosen evidence, the programme should allow the student to collect such evidence and receive feedback from the examiners, external experts and/or peers. The requirements that this evidence must meet can be found under the relevant courses on Canvas.**

### Article 20 Tests and assessments

1. The Examination Board will designate one or more examiners for each test. An examiner can also be an external expert.
2. The assessment of minors is described in the minor regulations. The examiner of the minor determines whether a student has passed the tests. The Examination Board of the coordinating institute that offers the minor must determine whether the student has passed the minor and ensure that the student receives a certificate. The result achieved for the minor is forwarded to the programme administration of the study programme in which the student concerned is enrolled.

### Article 21 Content of tests, duration of the test, test aids and test timetables

1. The content of the test, including the learning objectives, is described in **study manuals to be found on Canvas** and is made available to students at least **three** weeks before the test.
2. The examiner determines the period of time allowed to students to take the test as well as any aids that students may use during the test, subject to the guidelines and instructions provided by the Examination Board. This information must be stated on the examination paper.
3. The test timetable will be published through **Xedule no later than three weeks** before the start of the test period in question.

### Article 22 Registration for tests

1. **Registration for tests is not required.**

### Article 23 Proof of identity during tests

Students must prove their identity at every test by showing a legally valid form of ID other than a student ID card.

**Legally valid forms of ID include a passport, a Dutch ID card, a passport or ID card from an EEA country, a Dutch aliens' document or a driving licence from an EEA country. Students who cannot identify themselves as for mentioned are excluded from taking the test.**

### Article 24 Test marking system

1. The assignments, questions, assessment norms and criteria are determined by the examiners with due regard for the guidelines and instructions provided by the Examination Board. The examiner

conducts the test and determines the result on the basis of the determined assessment standards and assessment criteria.

2. If one and the same test is conducted and assessed by more than one examiner, the Examination Board will ensure that the examiners adhere to the same standards and criteria.

#### Article 25 Test results

1. The test results must be announced in writing to the student within ten days of the date of the test apart from the exceptions laid down in the Teaching and Examination Regulations. The study programme administration is responsible for announcing the test results. The privacy of students will be respected when test results are announced.
2. Students are entitled to inspect all assessed tests and the accompanying assessment criteria and to be given feedback on the results.
3. Inspection is subject to the procedure described in **Annex 1**.
4. Feedback is given according to the procedure described in **Annex 1**.
5. **At most once a year a student may request the Examination Board to provide a certified written overview of their results from which he can derive rights.**

#### Article 26 Inability to sit tests

1. Students who have acted in accordance with the registration procedure described in Article 22 but who are unable to sit the test for reasons beyond their control, the legitimacy of which reasons is subject to assessment by the Examination Board, may apply to the Examination Board to sit the test within a period of time to be set by the Board. *The student in question must have notified ... by email before the test that he/she has been prevented from sitting, including the reasons for not attending.*
2. The application referred to in the previous paragraph must be submitted in writing to the chairman of the Examination Board and include the necessary evidence (see Article 38(3)). The Examination Board will then take a decision and inform the student concerned. If the request is granted, the Examination Board will set a date, time and place for the test. Any rejection of the request will be substantiated and the student will be informed of his right to appeal. In assessing the request, the Examination Board's primary criteria are the obstruction of the study progress and the student's personal circumstances.
3. If such a request relates to a test of a minor offered across Fontys, the student must direct the request to the coordinating institute responsible for the minor, as described in regulations governing the minor

#### Article 27 Request for a review

1. Students who do not agree with an assessment can submit a request for a review of the assessment to the Examination Board within 4 working weeks after the date of the assessment (see Article 38(3) of these Teaching and Examination Regulations and Article 44 of the Students' Charter). The Examination Board must take a decision within 4 working weeks at a maximum.
2. Students may also appeal directly to the Examination Appeals Board within 6 calendar weeks after the date of the assessment via [www.fontys.nl/studentenloket](http://www.fontys.nl/studentenloket). (see Article 45 and Article 46 of the Students' Charter).

#### Article 28 Resits

1. Tests are conducted at least twice an academic year. Students can resit components marked with a pass no more than once, and at least once, in which case the highest mark will count. **When resitting a pass mark, use should be made of planned, regular opportunities. A special resit arrangement applies to meeting the admission threshold for study program 13/14. See Art. 17 paragraph 3 of these OER and chapter 2.1 of Annex 1.**
2. At least two opportunities to take tests that assess the material they have learned will be offered. Following these two test opportunities, the material to be studied for the test may be adapted to the material offered in the teaching block prior to the test. An up-to-date description of the material to be tested can be found **in the most recent project manual, which can be found in Canvas. A student can view the manual by requesting access from coordinator of the study programme.**
3. **If a test consists of an assessment of freely-chosen evidence, then the programme should offer the student an option of improving or supplementing the evidence.**

#### Article 29 Period of validity of results - evidence

1. The period of validity of successfully completed component tests is **ten years**. **Evidence submitted to the assessments is valid for two test opportunities.**

Results achieved for interim examinations can only lapse if the understanding/knowledge/skills to which these interim examinations relate can be shown to be obsolete. Understanding, knowledge and skills that were assessed more than 10 years ago can evidently be shown to be obsolete. The Examination Board may extend this term.

2. In the event of special circumstances as referred to in the Profiling Fund Scheme, the period of validity of interim examinations will as a minimum be extended by the duration of the support granted on the basis of that scheme.
3. If the study programme has been substantially altered, details on how this term will be restricted can be stated below, whether in the form of a written decision issued to a student or incorporation in the Teaching and Examination Regulations, if it applies to the entire cohort.

### **Article 30 Graduation product - Knowledge bank**

**Graduation products of the study programme are not entered in a knowledge bank.**

### **Article 31 Study progress**

The study programme is responsible for recording the test results in the programme administration.

### **Article 32 Advice regarding the continuation of studies<sup>6</sup>**

1. During the first year of enrolment in the foundation phase of a bachelor study programme and, where possible, prior to the start of the second semester, the student is given advice on his study progress. If the study progress is unsatisfactory, the student will receive a written warning and be told that if the study progress continues to be unsatisfactory, he will receive a binding negative advice regarding the continuation of his studies. A reasonable period within which the student must have improved his grade point average and the opportunities a study programme offers in that regard are stated in the warning. (*Section 7.8b of the Act.*)

A student who has not received a warning at that stage may yet receive one at a later point in the first year if he has fallen behind, and will be given a period within which to improve his grade point average.

The student will be given a warning in the following cases:

**23 or less credits have been achieved after two periods (quarters).**

2. The study programme must give students advice regarding the continuation of studies in writing before the end of their first year of enrolment (12 months) in the foundation phase. Advice may be related not only to the continuation of the study programme, but also to the main subject the student may take. Advice regarding the continuation of studies can be negative (binding negative study advice), meaning that the student's enrolment in that particular study programme will be terminated and that he will not be allowed to re-enrol in the same study programme.
3. Advice regarding the continuation of studies is based on the student's results in the foundation year. The Examination Board advises the institute director on advice regarding the continuation of studies to be given. This advice must take into account the student's personal circumstances. Students must report any personal circumstances to their student coach or student counsellor the moment they occur.

If the student misses the deadline for reporting special circumstances, the Examination Board will examine whether it was excusable for the student to miss the deadline for reporting those circumstances.

Engaging in top-class sports activities by students who have been granted a Top-Class Sport or Talent status are entitled is regarded as a special circumstance, on the basis of which the delivery of advice regarding the continuation of studies can or will be deferred. A minimum number of credits these students must earn in order to be eligible for such postponement has been established (**see also paragraph 4 of this article**).

The practice of running a business of his own by student entrepreneurs who have been awarded student entrepreneur status, as defined in the Fontys Student entrepreneur scheme, is also regarded as a special circumstance, on the basis of which the delivery of advice regarding the continuation of studies is deferred. However, a minimum number of credits which must be achieved to qualify for that deferral may be specified for student entrepreneurs (see also paragraph 4 of this article).

4. **The student will be given positive study advice regarding the continuation of studies if he achieves 60 EC in the foundation phase.**  
**The student will be given a binding negative study advice regarding the continuation of studies if he achieves less than 60 EC in the foundation phase.** Students who have been granted an Elite Class or

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<sup>6</sup> **Due to the COVID pandemic, different regulations apply with regard to study advice for the academic years 2019-2020, 2020-2021 and 2021-2022. These regulations were drawn up in collaboration with the Examination, Assessment and Program Committee and published on the portal with the TER.**

Talent status as referred to in Article 32(3) must have earned at least **40** credits in order to be eligible for postponement of their study advice.

The minimum number of credits which that must be achieved to qualify for that deferral for student entrepreneurs is **40**.

5. Where there are special circumstances as defined in paragraph 3 of this article which may have had an influence on the credits the student obtained, the delivery of advice regarding the continuation of studies may be deferred until the end of the second year of enrolment or until the end of a shorter period. At the end of the second year or the shorter period, there will be a further review of whether the student has met the criteria for a positive study advice as defined in paragraph 4.
6. Students who seek the termination of their enrolment during the first year of enrolment will be given a warning from the director stating his expectation that they may not be suitable for the study programme. The director must seek the advice from the Examination Board before doing so. The number of months of enrolment students have left before being given advice regarding the continuation of studies must also be determined in the event the student should decide to enrol in the same study programme at a later date (see also Article 35).

### **Article 33 Additional provisions concerning binding negative advice regarding the continuation of studies**

1. An institute wishing to issue binding negative advice regarding the continuation of studies must make provisions that allow for, among other things, a student's personal circumstances and which are aimed at guaranteeing a student's good progress.
2. Binding negative advice regarding the continuation of studies is valid for a period of **six** years.
3. At the student's request, the institute director change the period or give permission for a student to re-enrol in spite of the binding negative advice as referred to in Section 7.8b(3) of the WHW.
4. A binding negative advice regarding the continuation of studies refers to the full-time, part-time and dual forms of the study programme, unless otherwise stated.
5. Each binding negative advice regarding the continuation of studies must expressly state that the binding negative advice only refers to the study programme mentioned. Every binding negative study advice regarding the continuation of studies must include a referral, to either another study programme, the student counsellor or the study choice adviser.

## **Section 7 Graduation**

### **Article 34 Examinations - certificates - diploma supplement**

1. Students have passed the examination of the foundation year or the study programme if they have passed all units of study which form part of the foundation year or the study programme, as referred to in Article 15. (*Section 7.10 of the Act.*)
2. Certificates are given at the following occasions:
  - on passing the foundation year examination;
  - on passing the study programme's final examination.
3. The certificate will only be given after it has been established that the student is enrolled and has paid his tuition fees for all the enrolment years. (*Section 7.11 of the WHW.*)
4. After successful completion of the examination, the Examination Board awards the certificate. The certificate is dated on the date of the student's final academic activity (test or assessment). The certificate of a study programme comes with a diploma supplement. This diploma supplement may include mention of a student's board activities (see Article 11). Students who have served as members of the Examination Appeals Board may also request that activity to be included on their diploma supplement.

The Examination Board will determine whether a student has passed within a maximum of eight calendar weeks after the student's final academic activity (test or assessment).  
If the student wishes for the certificate to be dated later, the student must postpone the completion of his final academic activity (test or assessment).
5. The certificate is signed on behalf of the Examination Board by the (deputy) chairman, the (deputy) secretary, the candidate and, if applicable, an external expert. (*Section 7.11 of the WHW.*) On behalf of the institute, the Examination Board also confers on the student the degree if the student has taken the study programme examination.

For the study programme's examination the **Bachelor of Science** degree is awarded.
6. The award ceremony takes place at a time decided by the institute.

Students who passed the study programme examination and have requested the postponement of the award of the certificate may be issued a statement that the study programme degree has been conferred on them. (*Section 7.11 of the WHW.*)
7. **The certificates of students whose performance has been extraordinary will state the distinctions referred to below.**

**The student must request the statement of distinction from the Examination Board at least four weeks before the scheduled graduation date.**

**The distinction 'cum laude' is the highest degree possible.**

**After completing the foundation year, students receive the distinction cum laude if they have achieved an average of 8.0 or higher for the individual components in the first year of the study programme and none of the grades for these components is lower than a 7.0.**

**After completing the bachelor year, students receive the distinction cum laude if they have achieved an average of 8.0 or higher for the individual components in the major in the fourth year of the study programme and have achieved at least an 8.0 for their final project and none of the grades for these components is lower than a 7.0.**

8. The Executive Board reports to DUO the students that have passed the final examination of the study programme.

### **Article 35 Statement on departure**

1. Every student who seeks to terminate his enrolment without having passed the study programme's final examination will be invited for an interview.
2. At the student's request, the student may be issued a statement listing any results achieved.
3. The statement must specify that the interim examination test results will in principle be valid for **ten** years. The statement can include a reservation in the event of a substantial overhaul of the study programme. (See Article 29.)

### **Article 36 Transfer**

1. **Any specific arrangements made with one or more universities with respect to the Bachelor's programme in order to facilitate the smooth transfer of students to a university Master's programme are detailed below.**

**The department has made agreements with the following Master's programmes offered by the University of Tilburg:**

- **Strategic Management**
- **Supply Chain Management**
- **Information Management**

**The department has made agreements with the following Master's programmes offered by Eindhoven University of Technology:**

- **Operations Management & Logistics**
- **Innovation Management**

**By way of preparation for these Masters programmes it is possible to complete the entire pre-Master's programme within the Bachelor's programme. Requirements for admission are a pass in basic mathematics at the TU/e and an intake interview with the department management. Note that the preparation for the test in basic mathematics starts in Year 2 Q 3.**

## **Section 8 Irregularities and fraud**

### **Article 37 Irregularities and fraud**

1. If irregularities are discovered in connection with a test, as a result of which the Examination Board cannot guarantee the test's quality and any of its results, the Examination Board may forgo having the test checked, or declare a test result void. In such cases, the Examination Board must ensure that an opportunity to resit the test in the near future is offered to the affected students.
2. If a student is guilty of an irregularity committed with respect to (a component of) an examination or fraud, the Examination Board may exclude the student from sitting one or more tests of the study programme for a period to be determined by the Examination Board but which will not exceed one year. Any act that contravenes the regulations that have been established regarding testing and assessment shall be considered fraud in the sense of this article. If the test has already been assessed, the result will be declared void.
3. In the case of serious fraud, the Examination Board can propose to the Executive Board that the enrolment of the student involved be prematurely terminated (*Section 7.12b of the WHW.*)
4. If the irregularity or fraud is only discovered after the examination, the Examination Board may withhold or claim back the certificate of the study programme or decide that the certificate will not be issued unless the student sits a new test or examination in the components to be determined by the Examination Board and in a fashion to be determined by the Examination Board.
5. Before taking a decision, the Examination Board will hear the student and any other interested parties. A report will be drawn up of this hearing, of which a copy is forwarded to the student. The Examination Board must notify the student of its decision without delay, which notification can be

given orally if required but must in any event also be issued in writing. Furthermore, the student is informed of his right of appeal.

6. The Examination Board makes up a report of its decision and the facts it is based on.

## Section 9 Examination Board, appeal

### Article 38 Examination Board

1. The institute director establishes an Examination Board for each study programme or group of study programmes.
2. The Examination Board's duties and responsibilities are laid down in the WHW. (*Sections 7.12, 7.12b and 7.12c of the WHW*). These include the following duties and responsibilities:
  - responsibility for guaranteeing the quality of testing;
  - responsibility for guaranteeing the quality of the organisation of and the procedures surrounding tests and examinations;
  - to determine objectively and professionally whether a student has passed an examination;
  - to award certificates and the diploma supplement;
  - to determine alternative tracks;
  - to assess applications for exemptions and reviews and to award applications for special facilities;
  - to determine whether an examination has been conducted in a way other than that prescribed in the TER;
  - approval of the details of a foreign minor or external minor;
  - to give advice to the institute director on advice regarding the continuation of studies to be issued;The composition of the Examination Board can be found in the Appendix 'Composition of the Examination Board'.
3. An application to the Examination Board can be submitted **via the portal** (see also Article 26(2) and Article 27).

### Article 39 Appeals

Students who do not agree with a decision of the Examination Board can lodge an appeal against this decision within six calendar weeks after the date of the decision with the Examination Appeals Board via [www.studentenloket.nl](http://www.studentenloket.nl) (see Articles 45 and 46 of the [Students' Charter](#)). (*Section 7.61 of the WHW.*) Students can contact the Student Counselling Office ([iStudent@fontys.nl](mailto:iStudent@fontys.nl)) for help on lodging an appeal.

## Section 10 Retention and hardship clause

### Article 40 Retention of documentation

1. The Examination Board is responsible for retaining the minutes of its meetings and its decisions for a period of seven years.
2. The Examination Board is responsible for retaining its issued statements, among others, the statement on departure of a student who terminates his enrolment without having passed the study programme's final examination, for a period of ten years.
3. The Examination Board will ensure that the following information on each student will remain in the institute's archives for 50 years:
  - information on whether each student has obtained a foundation year certificate and/or a certificate of higher professional education including the list of marks.
4. The institute director is responsible for retaining test papers/assignments, assessment criteria, marking standardisation, pass marks, test matrices and test analyses for a period of seven years.
5. The institute director is responsible for retaining the lists drawn up and signed by the examiners containing the results achieved for a period of ten years.
6. The institute director is responsible for ensuring that all final papers and other kinds of tests in which students demonstrate their command of all aspects of the final attainment level, including assessments, will be kept for a period of seven years.
7. For the purpose of the external assessment of the programme in connection with accreditation, the institute director will ensure retention of a representative set of tests, including assessments, for a period of two years after the assessment.
8. The institute director is responsible for ensuring that the work completed by the student (written and non-written, including digital work) including assessments, with the exception of the work forming part of the representative set of final papers, is either destroyed or returned to the student after the expiry of a term of at least six months following the publication of the result. This term may be extended if necessary in connection with an appeal procedure.

## Article 41 Hardship clause

1. The Examination Board can make provisions for serious injustices that occur as a result of the application of these rules; it can also make decisions in cases not provided for by these rules. In order to decide whether the hardship clause must be applied, the Examination Board must weigh the interests of the student concerned and those of the study programme. Cases requiring immediate action may be heard by the chairperson of the Examination Board or his deputy after which the other members must be notified as soon as possible.
2. Students must apply in writing, stating reasons, to the Examination Board for the application of the hardship clause in accordance with Article 44 of the Students' Charter. The Examination Board decides on the student's application and communicates this decision in writing, stating reasons, to the student concerned, who is also informed of his right of appeal.

## Section 11 Final provisions and implementation

### Article 42 Entry into force, amendments, publication and official title

1. The TER applies to all students enrolled in the study programme in question during the 2022-2023 academic year, unless otherwise stated below.
2. The general section of these regulations and any amendments thereto will be established by the Executive Board, after having obtained the consent of the students' section of the Central Participation Council. PC's will be given an opportunity to issue advice to the CPC. That general section of the TER constitutes the basis on which the study programme-specific TER for each study programme will be drawn up before being submitted to the Examination Board for their advice and the (joint) PC and IPC for their advice/consent. The (joint) PC advises the institute director and sends its advice to the IPC for informational purposes. The IPC advises the institute director and sends its advice to the (joint) PC. The establishment of and amendments to the study programme-specific TER are effected following a proposal from the institute and require the consent of the students' section of the competent IPC and the (joint) PC. (*see Sections 10.3c, 10.20 and 7.13 of the WHW.*)
3. The text of the TER can be amended if warranted by changes to the organisation or organisational components with due observance of the provisions of paragraph 4. In the event of an interim change, the procedure as described in paragraph 2 applies.
4. If the interests of an individual student are prejudiced as a result of interim amendments of the regulations, the student may submit a written application to the Examination Board to protest against the amendment of the rules. The Examination Board examines the student's application and bases its decision on a weighing-up of the interest of the individual student on the one hand and the interest of the quality of the study programme on the other.
5. The institute director adopts the study programme-specific TER before 1 June of the academic year preceding the academic year that starts on 1 September. He ensures the publication of the study programme-specific component of these regulations and any amendments thereto by making them available for inspection with the secretariat of the study programme and placing them on the website.
6. *The official title of these rules is 'General Section of the Teaching and Examination Regulations of Fontys'.*  
The official title of the TER of the Bachelor's programme is **"Bachelor TER Fontys College of Business Management, Education and Technique / Industrial Engineering and Management 2022-2023, abbreviated "TER Bent/ IEM 2022-2023".**

### Article 43 Transitional provisions

When a study programme is subject to a substantial overhaul, the following transitional provisions will apply. **After the last regular activities of the 'old' programme and the related test or examination have been completed, this test or examination will be held two more times by way of resits. After that, it will be decided which test or examination that is part of the 'new' programme the student must sit to replace the 'old' one.**

### Article 44 Unforeseen cases

The Examination Board decides in all cases not provided for by the study programme-specific part of the TER, unless the issue is covered by the institute director's competency.

## **B - Set-up of the study programme and support facilities**

### 1. Set-up, organisation and execution of the study programmes

Information on the set-up, organisation and execution of the study programmes can be found in:

- *the study programme's digital prospectus*
- the Teaching and Examination Regulations (see under A).
- 

### 2. Facilities for students

Information on facilities for students can be found at:

- the institution-specific section of the Fontys Students' Charter ([www.fontys.edu/rules](http://www.fontys.edu/rules))
- the website of Fontys, among others, Fontys helps
- the website of [Fontys Study Abroad](#)

### 3. Study support

Information on study support can be found in:

- the Teaching and Examination Regulations (see under A)

## **C - Internal complaints procedure**

**Students whose interests are directly affected by acts carried out by a staff member or a student against them, or who have a grievance regarding organisational matters, may lodge a complaint with the Executive Board, as described in Article 47 of the Students' Charter.**



# Annex 1. Tests and study programme

## Chapter 1 Tests

### 1.1 General remarks

A test may be a project, an exam, a task or an assessment.

Tests are taken in every period. (A period is often referred to as 'Q'- the abbreviation of 'Quarter').The study programme manual of the relevant period states which tests must be taken in the examination period (= period at the end of a study period in which tests are scheduled). The study programme includes a number of measures to facilitate successful completion of these tests.

- Information with regard to the content of the tests can be found in the study programme manual of the relevant period.
- Re-examination of an exam takes place immediately after the regular examination period. Final opportunities for a resit of the exams from period 4 and 8 are offered in the week of introduction starting the following study year.
- A **re-examination is offered once in the same format**. This means that the content of the test will be the same. If you do not pass the test for the second time, you must make sure to verify whether the examination material for the next test has been changed. You can find this information in the most recent project manual. Approach the project coordinator for this. He can give you access to the most recent Canvas environment
- In order to pass a test, students must achieve a score of **at least 5.5**.
- If in compiled tests it is determined that a threshold value must be achieved for each item, the fact remains that the total test score must be **at least 5.5** in order to pass the test.
- A resit of a project can be adjusted by the project coordinator to the aspects in which the student has failed.

### 1.2 Course of events during an exam

The student must comply with the following rules when taking an exam:

- The student must place his/her ID visibly on the corner of the table.
- A student pass, proof of registration, or an OV-card are not valid proofs of ID. A copy of a valid ID is not sufficient proof of identification.
- The student must sign an attendance list. After signing the attendance list, he/she is expected to have taken the exam. The supervisor checks the attendance list according to the ID.
  - The presence of mobile telephones and/or other smart devices is **not** permitted.
  - Students may leave the exam room no sooner than 30 minutes after commencement.
  - Students are not allowed to communicate with each other in any way during a written exam.
- Without explicit approval of the supervisor, students are not allowed to share tools, papers, drawing material and the like.
- Toilet visits must be limited as much as possible. In general, the rule is that students who are still taking the exam are not permitted to be outside the testing room simultaneously.
  - Students must state the following details on all the sheets of paper that they wish to submit:
    - Name of student
    - Student number
    - Study course for which the exam is being taken
    - Date on which the exam is being taken

- An exam must always be submitted (if necessary, a blank exam with the aforementioned details).
- Immediately after receiving a copy of the exam, the student must check whether he/she received a complete copy. If this is not the case, he/she must report this immediately to the supervisor.
- A student who is found guilty of fraud or of soliciting fraud can be expelled from one or more exams of the study programme for maximum one year. If the test was already assessed, the result will be declared invalid. **Also classified as fraud is the use of aids not explicitly allowed.**

### 1.3 Notification of results and feedback

The results of the tests are published in Progress no later than 10 working days after the exam. In order to receive feedback on the exam, students are given the opportunity for an inspection after the examination period. Students should make use of the scheduled hours of inspection. The student may, within a period of four working weeks after the date of the assessment request a review of the assessment from the Examination Board. Students may also appeal directly to the Examination Appeals Board within six calendar weeks after the date of the assessment, see also Article 27 of the general section of this TER.

## Chapter 2 Extra resits and exemptions

### 2.1 Extra resits

During the study programme the situation may arise in which a student fails to meet the standards stipulated to permit transfer in his cohort. If a student has passed all the programme components that are offered and/or tested in a given period and still has outstanding programme components that are not offered or tested or in which he is not yet allowed to take part, the study programme is halted.

If a student is unable to do educational activities for more than one teaching period (one quarter) due to just one test not having been passed, the student is given the opportunity to resit this test in the next examination period. If the test is not scheduled during this examination period, an opportunity must be created for the student. The student can submit a request for this to the Examination Board.

Extra resits are always scheduled in academic week 9 or 10. The application must be received by the Examination Board no later than in academic week 4 of the period in which the student wishes to take the extra resit.

With regard to meeting the access requirements for entry into study program 13/14, a special resit regulation applies for those students who have already incurred study delay. See also article 14 paragraph 4 of the general part of this TER. A request to qualify for early test opportunities for courses (both exams and tasks) from year 2 that are not regularly offered in the current semester must ultimately in week 4 of Q2 resp. Q4 have been received by the Examination Board. A prerequisite for processing this request is that the positive advice from team SLB2 is included. This advice can be obtained after a study advice meeting with team SLB2, [SLBteam2@fontys.nl](mailto:SLBteam2@fontys.nl). The student must register for this interview ultimately in week 10 of Q1 resp. Q3. The early test opportunities will be planned in week 9 or 10 of Q2 resp. Q4.

### 2.2 Exemptions

If a student is of the opinion that he can obtain exemption from a subject on the basis of a previous academic qualification, he must apply to the Examination Board. (see also art. 6 paragraph 2 of the general section of this TER)

Applications to the Examination Board can be sent via the department's portal.

## Chapter 3 Study programme track and intake

New students are admitted during the regular admission period in September or in February, unless a different study programme track is determined during the intake interview. The agreed upon study programme track and other agreements are presented to the Examination Board. They are recorded in the intake form that is included in the student's record.

Please note:

In the listing here below, the limits are the entrance requirements for the different phases of the course of study. **See for information concerning assessments Paragraph 4.3 and concerning limits in Paragraph 4.2.**

Students are free to decide on the order of minor and internship. They can start with the minor, or start with the internship.

### Study programme regular track September

Programme length: 4 years

Year 1: P1 – P2 – P3 – P4

Year 2: P5/6 – P7/8

Year 3: Internship – Minor

Year 4: P13/14 – Graduation

	sept	nov	feb	apr
	Q1	Q2	Q3	Q4
1	15 ec Project 1	15 ec Project 2	15 ec Project 3	15 ec Project 4
2	D1	30 ec Project 5/6		30 ec Project 7/8
3	D2	30 ec Internship/Minor	A2	30 ec Minor/Internship
4	D3	30 ec Project 13/14	D4	30 ec Graduation

Fig. 1 Studyprogramme regular track September

#### Admission to assessments (PET1, 2 and 3):

**A1** project 1,2,3, and 4 completed

**A2** project 5/6 and 7/8 completed, internship completed

**A3** during Year 4

#### Limits (D):

**D1<sup>7</sup>** propaedeutic phase passed

**D2** 40 EC's passed of P5/6 and P7/8

**D3** Year 2 completed, only 'free credits' and at most one exam or task may still be open,

Internship passed, minor completed

**D4** Achieved: A2 and of programme P13/14: Strategic project and Preparation Graduation

### Study programma regular track February

Programme length: 4 years

Year 1: X – X – P3 – P4

Year 2: P1 – P2 – P7/8

Year 3: P5/6 – Stage

Year 4: Minor – P13/14

Year 5: Graduation

	sept	nov	feb	apr
	Q1	Q2	Q3	Q4
1			15 ec Project 3	15 ec Project 4
2	15 ec Project 1	15 ec Project 2	A1	30 ec Project 7/8
3	D1	30 ec Project 5/6	D2	30 ec Internship
4		30 ec Minor	D3	30 ec Project 13/14
5	D4	30 ec Graduation	A3	

Studi programme regular track February

#### Admission to assessments (PET 1, 2 and 3):

**A1** project 3,4,1 and 2 completed

**A2** project 7/8 and 5/6 completed, internship completed

**A3** during Year 4

#### Limits (D):

**D1<sup>8</sup>** propaedeutic phase passed

**D2** 40 EC's passed of P7/8 and P5/6

**D3** Year 2 completed, only 'free credits' and at most one exam or task may still be open,

Internship passed, minor completed

**D4** Achieved: A2 and of programme P13/14: Strategic project and Preparation Graduation

<sup>7</sup> Due to the COVID pandemic, different regulations apply with regard to study advice for the academic years 2019-2020, 2020-2021 and 2021-2022. These regulations were drawn up in collaboration with the Examination, Assessment and Program Committee and published on the portal with the TER.

<sup>8</sup> See above

## Chapter 4 Transitional standards

### 4.1.1 Transitional standards of propaedeutic year for the study programme regular track start September from September 2021

Within the study Industrial Engineering and Management you must complete your first year requirements within 1 year (60 EC). The annual programme of the propaedeutic phase consists of 4 projects: Study Project Product, Study Project Market, Study Project Process and Study Project Change.

At the end of the first year, the requirements for the first year certificate must be completed to be able to continue your course of study. You need to therefore obtain  $4 \times 15 = 60$  ECs. To earn these ECs you will have a maximum of two chances: the first chance and the repeat attempt, the resit.

When all results of Period 4 are known, the following situations might occur:

1. You obtained all 60 ECs. You will receive your propaedeutic diploma and you are promoted to Year 2.
2. You have earned a minimum of 56 ECs and you can successfully appeal to the compensation arrangement (see directly below). This situation can occur before taking a third attempt (see below at 3) and after taking the third attempt. When you achieve 60 ECs by applying the compensation arrangement, you have passed the propaedeutic phase and you will be promoted to Year 2. The Examination Board will apply the compensation arrangement for you, as a student you do not need to take any action.
3. You have passed all 4 projects by the end of Period 4 and you have earned a minimum of 54 ECs. In this case you are offered one resit per task and/or exam and/or part of the Professional Empowerment Program, in order to earn the last 6 ECs;
4. You passed three out of the four projects by the end of Period 4, and earned a minimum of 49 ECs. In spite of the opportunity for a repair, you have not completed one project with your project group with a sufficient grade. You then are eligible to take an individual resit by the end of the first year study programme for the project you did not pass;
5. During the study year there are personal circumstances which have hindered the progress you have made. In this case, you are eligible for Article 32 paragraph 3 of the general part of this TER. Please be aware that said personal circumstances must be reported to your student coach (personal mentor) as soon as they occur.

If none of these situations occur, you cannot continue your study Industrial Engineering and Management. You will receive a binding negative study advice according to Article 32 paragraph 4 of the general part of this TER.

#### **Extra chances**

Extra chances will be scheduled in the two weeks before the beginning of the new study year. Please be aware of this scheduling when making plans for vacation.

#### **The compensation arrangement for the study program regular track starting from September 2021.**

All in all, you may compensate a maximum of two elements (tasks or exams only, no projects, no parts of the Professional Empowerment Program (Research, Reflect, Reveal) for which a ranking of 5.0 or higher has been achieved, with two elements (tasks or exams only, no projects, no parts of the Personal Empowerment Program) for which a ranking of 7.0 or higher has been achieved. This is possible to a maximum of 4 ECs. An exemption is not a ranking. The compensation arrangement is only applicable when the entire first year has been completed. A task may be compensated only with a task, and an exam only with an exam. The compensated ranking will be displayed in the results overview on Progress with the code 'VR'.

### 4.1.2 Transitional standards of propaedeutic year for the study programme regular track start February from February 2022

The principles for the propaedeutic phase of this study programme are the same as those that apply to the programme that starts in September. However, the operationalization is somewhat different, because the propaedeutic year of this programme ends on January 31 and not on August 31.

Within the study Industrial Engineering and Management you are required to complete your first year requirements within 1 year (60 EC). The annual programme of the propaedeutic phase consists of 4 projects: Study Project Process, Study Project Change, Study Project Product and Study Project Market.

At the end of the first year, the requirements for the first year certificate must be completed to be able to continue your course of study. You need to therefore obtain  $4 \times 15 = 60$  ECs. To earn these ECs you will have a maximum of two chances: the first chance and the repeat attempt, the resit.

When all results of the four Study Projects are known (usually in the first week of February) the following situations might occur:

1. You obtained all 60 ECs. You will receive your propaedeutic diploma and you are promoted to Year 2.
2. You have earned a minimum of 56 ECs and you can successfully appeal to the compensation arrangement (see directly below). This situation can occur before taking a third attempt (see below at 3) and after taking the third attempt. When you achieve 60 ECs by applying the compensation arrangement, you have passed the propaedeutic phase and you will be promoted to Year 2. The Examination Board will apply the compensation arrangement for you, as a student you do not need to take any action.
3. You have passed all 4 projects by the end of Q2 and you have earned a minimum of 54 ECs. In this case you are offered one resit per task and/or exam and/or part of the Professional Empowerment Program, in order to earn the last 6 ECs;
4. You obtained 50 ECs\* or more. The compensation arrangement will not be applied, you have not passed the propaedeutic phase yet, but you are allowed to continue your studies in Year 2;
5. You passed three out of the four projects at the end of Q2, and earned a minimum of 45 ECs\*. In spite of the opportunity for a repair, you have not completed one project with your project group with a sufficient grade. You then are eligible to take an individual third chance to repair the project. The compensation arrangement will not be applied, you have not passed the propaedeutic phase yet, but you are allowed to continue your studies in Year 2;
6. During the study year there are personal circumstances which have hindered the progress you have made. In this case, you are eligible for Article 32 paragraph 3 of the general part of this TER. Please be aware that said personal circumstances must be reported to your student coach (personal mentor) as soon as they occur.

If none of these situations occur, you cannot continue your study Industrial Engineering and Management. You will receive a binding negative study advice according to Article 32 paragraph 4 of the general part of this TER.

#### **The compensation arrangement for the study program regular track starting from September 2021.**

All in all, you may compensate a maximum of two elements (tasks or exams only, no projects, no parts of the Professional Empowerment Program) for which a ranking of 5.0 or higher has been achieved, with two elements (tasks or exams only, no projects, no parts of the Professional Empowerment Program) for which a ranking of 7.0 or higher has been achieved. This is possible to a maximum of 4 ECs. An exemption is not a ranking. The compensation arrangement is only applicable when the entire first year has been completed. A task may be compensated only with a task, and an exam only with an exam. The compensated ranking will be displayed in the results overview on Progress with the code 'VR'.

\* This standard is used because the students of the February flow in the first week of February have not yet been able to use the resit opportunities for exams/tasks from Study Project 2.

#### 4.1.3 Transitional standards of propaedeutic year for the study programme regular track start September prior to September 2021<sup>9</sup>

Within the study Industrial Engineering and Management you are required to complete your first year requirements within 1 year (60 EC). The annual programme of the propaedeutic phase consists of 4 projects: Study Project Technique, Study Project Organization, Study Project Economy and Study Project Manpower. Each project has 3 study units:

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<sup>9</sup> **Due to the COVID pandemic, different regulations apply with regard to study advice for the academic years 2019-2020, 2020-2021 and 2021-2022. These regulations were drawn up in collaboration with the Examination, Assessment and Program Committee and published on the portal with the TER.**

<i>Work</i>	<i>Group/Individual</i>	<i>EC</i>
Project work	Group	5
Assignments	Individual	4
Exams	Individual	6
		15 (total per project)

At the end of the first year, the requirements for the first year certificate must be completed to be able to continue your course of study. You need to therefore obtain  $4 \times 15 = 60$  ECs. To earn these ECs you will have a maximum of two chances: the first chance and the repeat attempt, the resit.

When all results of Period 4 are known, the following situations might occur:

1. You obtained all 60 ECs. You will receive your propaedeutic diploma and you are promoted to Year 2.
2. You have earned a minimum of 54 ECs and you can successfully appeal to the compensation arrangement (see directly below). This situation can occur before taking a third attempt (see below at 3) and after taking the third attempt. When you achieve 60 ECs by applying the compensation arrangement, you have passed the propaedeutic phase and you will be promoted to Year 2. The Examination Board will apply the compensation arrangement for you, as a student you do not need to take any action.  
You will receive your propaedeutic diploma and you are promoted to Year 2.
3. You have passed all 4 projects by the end of Period 4 and you have earned a minimum of 54 ECs. In this case you are offered one chance per task or exam to complete a resit, in order to earn the last 6 ECs;
4. You passed three out of the four projects at the end of period 4 and you have earned a minimum of 49 ECs. In spite of the opportunity for a repair, you have not completed one project with your project group with a sufficient grade. You then are eligible to take an individual resit by the end of the first year study programme for the project you did not pass;
5. During the study year there are personal circumstances which have hindered the progress you have made. In this case, you are eligible for Article 32 paragraph 3 of the general part of this TER. Please be aware that said personal circumstances must be reported to your student coach (personal mentor) as soon as they occur.

If none of these situations occur, you cannot continue your study Industrial Engineering and Management. You will receive a binding negative study advice according to Article 32 paragraph 4 of the general part of this TER.

#### **Extra chances**

Extra chances will be scheduled in the two weeks before the beginning of the new study year. Please be aware of this scheduling when making plans for vacation.

#### **The compensation arrangement for study programmes of the regular track starting prior to September 2021**

All in all, you may compensate a maximum of two elements (tasks or exams only) for which a ranking of 5.0 or higher has been achieved, with two elements (tasks or exams only) for which a ranking of 7.0 or higher has been achieved. An exemption is not a ranking. The compensation arrangement is only applicable when the entire first year has been completed. A task may be compensated only with a task, and an exam only with an exam. The compensated ranking will be displayed in the results overview on Progress with the code 'VR'.

4.1.4 Transitional standards of propaedeutic year for the study programme regular track start February prior to September 2021<sup>10</sup>

The principles for the propaedeutic phase of this study programme are the same as those that apply to the programme that starts in September. However, the operationalization is somewhat different, because the propaedeutic year of this programme ends on January 31 and not on August 31.

Within the study Industrial Engineering and Management you are required to complete your first year requirements within 1 year (60 EC). The annual programme of the propaedeutic phase consists of 4 projects: Study Project Economy, Study Project Manpower, Study Project Technique and Study Project Organization. Each project has 3 study units:

<i>Work</i>	<i>Group/Individual</i>	<i>EC</i>
Project work	Group	5
Assignments	Individual	4
Exams	Individual	6
		15 (total per project)

At the end of the first year, the requirements for the first year certificate must be completed to be able to continue your course of study. You need to therefore obtain  $4 \times 15 = 60$  ECs. To earn these ECs you will have a maximum of two chances: the first chance and the repeat attempt, the resit.

When all results of the four Study Projects are known (usually in the first week of February) the following situations might occur:

1. You obtained all 60 ECs. You will receive your propaedeutic diploma and you are promoted to Year 2.
2. You have earned a minimum of 54 ECs and you can successfully appeal to the compensation arrangement (see below). You will receive your propaedeutic diploma and you are promoted to Year 2.
3. You have passed all four projects by the end of Q2, and you have earned a minimum of 54 ECs. In this case you are offered one chance per task or exam, in order to earn the last 6 ECs;
4. You obtained 50 ECs\* or more. The compensation arrangement will not be applied, you have not passed the propaedeutic phase yet, but you are allowed to continue your studies in Year 2;
5. At the end of Q2 you passed three out of the four projects, and earned a minimum of 45 ECs\*. In spite of the opportunity for a repair, you have not completed one project with your project group with a sufficient grade. You then are eligible to take an individual resit by the end of the first year study programme for the project you did not pass; The compensation arrangement will not be applied, you have not passed the propaedeutic phase yet, but you are allowed to continue your studies in Year 2;
6. During the study year there are personal circumstances which have hindered the progress you have made. In this case, you are eligible for Article 32 paragraph 3 of the general part of this TER. Please be aware that said personal circumstances must be reported to your student coach (personal mentor) as soon as they occur.

If none of these situations occur, you cannot continue your study Industrial Engineering and Management. You will receive a binding negative study advice according to Article 32 paragraph 4 of the general part of this TER.

#### **The compensation arrangement for study programmes of the regular track starting prior to September 2021**

All in all, you may compensate a maximum of two elements (tasks or exams only) for which a ranking of 5.0 or higher has been achieved, with two elements (tasks or exams only) for which a ranking of 7.0 or higher has been achieved. An exemption is not a ranking. The compensation arrangement is only applicable when the entire first year has been completed. A task may be compensated only with a task,

<sup>10</sup> **Due to the COVID pandemic, different regulations apply with regard to study advice for the academic years 2019-2020, 2020-2021 and 2021-2022. These regulations were drawn up in collaboration with the Examination, Assessment and Program Committee and published on the portal with the TER.**

and an exam only with an exam. The compensated ranking will be displayed in the results overview on Progress with the code 'VR'.

\* This standard is used because the students of the February flow in the first week of February have not yet been able to use the resit opportunities for exams/tasks from Study Project 2.

#### 4.2 Access requirements in programme following foundation year

On three distinct points in the programme, the study Industrial Engineering makes use of a limit in the form of access requirements. This means that you may not begin with the relevant instruction period if you have not complied with the norm. These three are:

- D2: Start internship: Propaedeutic phase passed, minimal 40 EC's obtained in Year 2, projects Year 2 passed
- D3: Start study programme 13/14:
  - Year 2 completed, only 'Free credits' may still be open and, at most, one exam or task may still be open
  - Minor completed
  - Internship achieved, assessment 2 may still be open

Note 1: a special resit arrangement may apply if you foresee that you will not meet these access requirements. See section 2.1 of this Appendix and article 14 paragraph 4 of the general part of this TER.

Note 2: 'Minor completed' means that you must have participated in the minor, but that it is not required that all components of the minor have already been passed.

- D4: Start graduation requirements: Assessment 2 passed and from study programme 13/14 achieved: Strategic project & preparation graduation

The coordinator of the relevant instruction period checks to ensure that a student complies with the admission standard. This check takes place in the week prior to the start of the new learning arrangement.<sup>11</sup>

#### 4.3 Assessments

Within the Industrial Engineering program, the student must pass three so-called assessments. An assessment can consist of the following parts:

1. Portfolio assessment
2. Performance assessment
3. Interview (assessors interview the student)
4. Advice given to the student and to the Exam Board.

Assessment 1 [PET<sup>12</sup> 1] takes place at the end of the first year. Condition of admission to this assessment is: all four projects of Year 1 are completed.

Assessment 2 [PET 2] takes place during periods 11, 12, 13 or 14. Condition of admission to this assessment is: projects 5/6 and 7/8 and the internship are completed.

Assessment 3 [PET 3] takes place during Year 4. Condition of admission to this assessment is: both minor and PET

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<sup>11</sup> **Due to the COVID pandemic, a different regulation applies with regard to admission to study program 13/14 in September 2022: : It is assumed that the student meets the requirement of 'internship completed', if all internship documents to be submitted (LU 1 to 4) have been submitted on time and the student has a positive assessment of the internship company. This regulation is drawn up in collaboration with the Examination, Assessment and Program Committee and published on the portal with the TER.**

<sup>12</sup> **PET means Professional Empowerment Test (this is a part of the Professional Empowerment Program –PEP)**

2 are achieved and the entire study programme is completed.

PET 1 will be scheduled at the end of period 4 (September track) and at the end of period 2 (February track). Resit in week 10 of period 4 resp. 2.

PET 2 and PET 3 take place four times a year. Students need to register for PET 2 and PET 3.

Information regarding the contents of the assessments can be found on the online learning environment of the program, see PEP guidelines.

Below is a more detailed explanation of this program.

### **Professional Empowerment Program (PEP)**

PEP spans all four academic years. This section deals with an explanation of PEP in Year 1.

In Year 1, PEP consists of two parts: (1) Research and (2) Reveal & Reflect. For this, respectively 4 and 5 ECs can be obtained.

The program is structured in such a way that the study load is (more or less) evenly distributed over the quarters. It is up to the student to plan this for him or herself. Research can be tested in all four quarters, on the basis of own registration. The student may use two of the four options. For Reveal & Reflect (PET1) there are two set test options, students are classified and do not have to register. A first chance in quarter 3 and a second chance in quarter 4. If for any reason the student does not take the opportunity in quarter 3, an NA will be registered. In the event of an NA or an unsatisfactory grade, the student will be reassigned to PET1 for quarter 4.

## Annex 2. Regulations Minor OPEX 2022-2023

### 1. Name minor: OPEX

### 2. English Name: Operational Excellence

### 3. Content Minor

The OPEX Minor enlarges the knowledge and skills of students Industrial Engineering and Management in the area of Operational Excellence. Nowadays many companies and organisations are trying to incorporate the basic ideas of Operational Excellence in their way of operating. Sometimes these approaches are called Operational Excellence, sometimes they are introduced as Lean Manufacturing, Quick Response Manufacturing (QRM) or Agile Manufacturing.

The minor focuses on the following three aspects of performance in operational processes:

- delivery performance;
- quality performance;
- efficiency in use of resources.

Concepts like Just-In-Time, Zero Defects and Waste-Less Production are central issues. On top of that, Operational Excellence also emphasises the concept of continuous improvement on all three aspects, including the crucial approach of change management.

The minor challenges the students on all aspects of Operational Excellence. A thorough analysis of lead times, process and product quality, use of resources, and the crucial impact of human behaviour and management approaches are the basis of these challenges. The main goal of the minor is to clarify for students what tools and methods are applicable in which circumstances and level of development. Also some already introduced tools and methods are studied in more depth. In the end, students are challenged to explore and use their talents to assist organisations in improving their journey towards Operational Excellence.

#### *Resume for diploma supplement:*

The minor Operational Excellence (OPEX) focusses on tools and methods to be used in a programme for continuous improvement towards Just-In-Time, Zero Defects and Waste-Less processes. Tools and methods used in approaches like Lean Manufacturing, 6Sigma, QRM, TPM, and Agile Manufacturing are studied in depth and their interrelation and applicability are discussed. On top of that, an emphasis is put on the crucial impact of a programme of continuous improvement and the required management and strategic support. The minor challenges students to explore and use their talents to assist organisations in improving their journey towards Operational Excellence.

### 4. Admission and Enrolment Minor

The minor is open for all students Technische Bedrijfskunde, Industrial Engineering and Management, and Bedrijfsmanagement MKB (or similar programmes). The minor is running full time during a semester, and is started twice a year (in September and in February). The maximum number of students participating is 32 (due to the way the minor is set-up). Enrolment is done based on FCFS-base, assuming the student is officially allowed to start with the minor (as indicated by the OER valid for the major of the student) and clearly understands what is required (to be checked during an intake). Priority is given to Fontys-students.

### 5. Overview Education Components (art.17 General Section of the OER/TER)

The minor consists of 6 components called 'Challenges'. Some of these challenges are connected to Development Lines to help in the preparations. These Development Lines have activities throughout the minor; challenges are concentrated in blocks of 2 to 4 weeks. Most challenges are based on group work; some are done individually. The themes for the challenges are "logistics", "quality", "usage of resources", and "real life - organisational change and improvement", "OPEX-research" and "Talent Discovery".

All components are supported by side-activities as workshops, tutor-sessions, excursions and/or games.

### 6. Enrolment in the education components

N/A

## 7. and 8. Examination Minor (art.20 and 22 General Section OER/TER)

<i>Frequency</i>	<i>Type of Examination</i>	<i>Individual / Group</i>	<i>Grading Scale</i>
Four group challenges	Assessment based on presentation of proposal.	Group	1-10
Two individual challenges	Assessment based on presentation of product.	Individual	1-10

All grades obtained need to be at least 5.5 in order to pass. When a component gets a “no pass” (< 5.5), a re-sit is needed. Because of the interrelation between the components, all re-sits need to be done within the minor period. Re-sits are done on an individual base; the moment and content of the re-sits are determined based on the reason(s) for the re-sit.

Challenges are graded based on ranking of the groups (assuming a “pass”).

If all components have a “pass”, the average of all grades obtained (equally weighted) is the final grade for the minor (covering 30 EC). See the Study Guide published on Onedrive.

The criteria used for the assessment of a minor component are published in a component study guide which will be made available at the start of the component considered.

## 9. Board of Examination (art.38, General Part OER)

Fontys BEnT-Board of Examination, executive chamber Technische Bedrijfskunde

## 10. Period of Validity

This information is valid for the study year 2022-2023.

## 11. Prerequisites Minor

To be able to enrol for the minor, the student must:

- be enrolled in one of the following study programmes (or a similar programme):
  - Technische Bedrijfskunde - voltijds (TB);
  - Industrial Engineering and Management (IEM);
  - Bedrijfsmanagement Midden- en Klein Bedrijf (BMKB)
- have obtained the Propaedeutic Diploma from one of these programmes;
- fulfil all general requirements for enrolment according to the OER relevant for the major of the student.

## 12. Admission

The minor is not open for students not meeting the requirements from 10.

The maximum number of students participating each time the minor starts, is 32.

**No other requirements are to be met for participation in the minor or passing the minor than mentioned in these minor regulations.**



Chapter 3 Overview of studyprogrammes

Code	Title	Category	WL*
4848E113	IE&M year 1	Programme	60
4848E113	Y1Q1 Programme / Technology	Group	15
4848E113	subgroup 48E113	Subgroup	15
481E1KOF	Project The device	Course	4
481E1CUL	Culture Immersion	Course	1
481E1IND	Tests Quarter 1	Course	6
481E1MO	Management & Organization 1	Subcourse	1,5
481E1PRO	Production Technology 1	Subcourse	2
481E1BEZ	Company Visit 1	Subcourse	0,5
481E1BE	Business Economics 1	Subcourse	2
481E1TAAK	Tasks Quarter 1	Course	4
481E1WER	Workshop Technology 1	Subcourse	1
481E1COM	Competence Document 1	Subcourse	0,5
481E1STA	Statistics 1	Subcourse	1
481E1NAT1	Physics 1	Subcourse	1
481E1TEK	Engineering Drawing 1	Subcourse	0,5
4848E123	Y1Q2 Programme / Organization	Group	15
4848E123	subgroup 48E123	Subgroup	15
481E2BAK	Project Tray Factory	Course	5
481E2IND	Tests Quarter 2	Course	6
481E2KWA	Quality 2	Subcourse	1,5
481E2ASP	ASP 2	Subcourse	2
481E2WIS	Mathematics / Statistiek 2	Subcourse	2
481E2BEZ	Company Visit 2	Subcourse	0,5
481E2TAAK	Tasks Quarter 2	Course	4
481E2NAT	Physics 2	Subcourse	1
481E2COM	Competence Document 2	Subcourse	0,5
481E2BE	Business Economics 2	Subcourse	1
481E2ENG	English 2	Subcourse	0,5
481E2SOC	Sociology / Psychology 2	Subcourse	1
4848E133	Y1Q3 Programme / Economy	Group	15
4848E133	subgroup 48E133	Subgroup	15
481E3FIE	Project Bicycle Factory	Course	5
481E3IND	Tests Quarter 3	Course	6
481E3MVO	Corporate Social Responsibility 3	Subcourse	1,5
481E3BE	Business Economics 3	Subcourse	2
481E3WIS	Mathematics / Statistiek 3	Subcourse	2
481E3BEZ	Company Visit 3	Subcourse	0,5
481E3TAAK	Tasks Quarter 3	Course	4
481E3OND	Research Skills 3	Subcourse	1
481E3COM	Competence Document 3	Subcourse	0,5
481E3NAT	Physics 3	Subcourse	1
481E3MO	Management & Organization 3	Subcourse	1
481E3ENG	English 3	Subcourse	0,5
4848E143	Y1Q4 Programme / Manpower, Spiral Dynamics	Group	15
4848E143	subgroup 48E143	Subgroup	15
481E4CHA	Project Change Agent	Course	5
481E4IND	Tests Quarter 4	Course	6
481E4CUL	Culture and Diagnose 4	Subcourse	1,5
481E4MO	Management & Organization 4	Subcourse	2
481E4WIS	Mathematics / Statistiek 4	Subcourse	2
481E4BEZ	Company Visit 4	Subcourse	0,5
481E4TAAK	Tasks Quarter 4	Course	4

481E4BE	Business Economics 4	Subcourse	1
481E4COM	Assessment (PET 1)	Subcourse	0,5
481E4NAT	Physics 4	Subcourse	1
481E4VER	Change & IT 4	Subcourse	1
481E4ENG	English 4	Subcourse	0,5

\*WL = Defined workload in ECTS.

\*\*Students who have started in Februari 2021 with programme 4848E113 in Quarter 1:

<b>Code**</b>	<b>Title</b>	<b>Category</b>	<b>WL</b>
481E1WT	Workshop Technology Quarter 1	Course	1
481E1WT-TA	Workshop Technology Quarter 1 - Task	Xcourse	1
481E1BD	Business Economics Quarter 1	Course	2
481E1BD-TE	Business Economics Quarter 1 - Exam	Xcourse	2
481E1PT	Production Technology Quarter 1	Course	2
481E1PT-TE	Production Technology Quarter 1 - Exam	Xcourse	2

Code***	Title	Category	WL
48E121	IE&M year 1	Programme	60
481ECU	Culture Immersion	Course	1
481ECU-TA	Culture Immersion - Task	Xcourse	1
481E1	Quarter 1 - IE&M year 1	Group	12
481E1HP	Project 1: The Product	Course	5
481E1HP-PR	Project 1: The Product - Project	Xcourse	5
481E1BU	Business Intelligence Quarter 1	Course	1
481E1BU-TA	Business Intelligence Quarter 1 - Task	Xcourse	1
481E1TK	Drawing Technique Quarter 1	Course	1
481E1TK-TA	Drawing Technique Quarter 1 - Task	Xcourse	1
481E1WT	Workshop Technology Quarter 1	Course	1
481E1WT-TA	Workshop Technology Quarter 1 - Task	Xcourse	1
481E1BD	Business Economics Quarter 1	Course	2
481E1BD-TE	Business Economics Quarter 1 - Exam	Xcourse	2
481E1PT	Production Technology Quarter 1	Course	2
481E1PT-TE	Production Technology Quarter 1 - Exam	Xcourse	2
481E2	Quarter 2 - IE&M year 1	Group	13
481E2MA	Project 2: The Market (Business(re)modeling)	Course	5
481E2MA-PR	Project 2: The Market (Business(re)modeling) - Project	Xcourse	5
481E2MV	CSR Quarter 2	Course	1
481E2MV-TA	CSR Quarter 2 - Task	Xcourse	1
481E2OR	Organization & Management Quarter 2	Course	2
481E2OR-TA	Organization & Management Quarter 2 - Task	Xcourse	2
481E2BR	Business Economics Quarter 2	Course	2
481E2BR-TE	Business Economics Quarter 2 - Exam	Xcourse	2
481E2BW	Business Mathematics Quarter 2	Course	3
481E2BW-TE	Business Mathematics Quarter 2 - Exam	Xcourse	3
481E3	Quarter 3 - IE&M year 1	Group	13
481E3PR	Project 3: The Process (Cartonax factory)	Course	5
481E3PR-PR	Project 3: The Process (Cartonax factory) - Project	Xcourse	5
481E3CC	Communication Quarter 3	Course	1
481E3CC-TA	Communication Quarter 3 - Task	Xcourse	1
481E3EG	English Quarter 3	Course	2
481E3EG-TA	English Quarter 3 - Task	Xcourse	2
481E3KW	Quality Management Quarter 3	Course	3
481E3KW-TE	Quality Management Quarter 3 - Exam	Xcourse	3
481E3SY	System Technology Quarter 3	Course	2
481E3SY-TE	System Technology Quarter 3 - Exam	Xcourse	2
481E4	Quarter 4 - IE&M year 1	Group	12
481E4DE	Project 4: The Change (Culture and Change)	Course	5
481E4DE-PR	Project 4: The Change (Culture and Change) - Project	Xcourse	5
481E4BI	Business Intelligence Quarter 4	Course	1
481E4BI-TA	Business Intelligence Quarter 4 - Task	Xcourse	1
481E4ST	System Technology Quarter 4	Course	1
481E4ST-TA	System Technology Quarter 4 - Task	Xcourse	1
481E4IS	Introduction to Statistics Quarter 4	Course	2
481E4IS-TE	Introduction to Statistics Quarter 4 - Exam	Xcourse	2
481E4OM	Organization & Management Quarter 4	Course	3
481E4OM-TE	Organization & Management Quarter 4 - Exam	Xcourse	3
481EPEP	Professional Empowerment Program	Group	9
481ERE	Professional Empowerment Program: Research	Course	4
481ERE-TA	Professional Empowerment Program: Research - Task	Xcourse	4

481ERR	Professional Empowerment Program: Reveal & Reflect (PET 1)	Course	5
481ERR-AS	Professional Empowerment Program: Reveal & Reflect (PET 1) - Assessment	Xcourse	5

\*\*\*In most cases for students who started from September 2021 in year 1.

Code	Title	Category	WL
4848E214	IE&M year 2	Programme	60
4848E21	Company assignment Improve a company process	Group	9
4848E21	subgroup 482E1	Subgroup	9
482E56CPB	Professional Empowerment Check 5/6	Course	1
482E56VB	Project Improve A Company Process	Course	8
4848E22	Tasks Quarters 5/6	Group	8
4848E22	subgroup 482E2	Subgroup	8
482E56ABP	Task Analysing Company Processes	Course	2
482E56BIS	Task Business Information Systems 5/6	Course	1
482E56COM	Task Communication 5/6	Course	1
482E56ENG	Task English 5/6	Course	1
482E56MNGG	Task Management game	Course	2
482E56RECH	Task Law 5/6	Course	1
4848E23	Exams Quarter 5	Group	7
4848E23	subgroup 482E3	Subgroup	7
482E56BE	Exam Business Economics 5/6	Course	2
482E56M&O	Exam Management & Organization 5/6	Course	2
482E56OML1	Exam Operations Management & Logistics 1	Course	3
4848E24	Exams Quarter 6	Group	5
4848E24	subgroup 482E4	Subgroup	5
482E56INKM	Exam Purchasing Management	Course	1
482E56NAT	Exam Physics 5/6	Course	1
482E56OML2	Exam Operation Management & Logistics 2	Course	3
4848E25	Free Credits Assignments	Group	1
4848E25	subgroup 482E5	Subgroup	1
482E56VS	Free Credits Assignment 5/6	Course	1
4848E26	Company Assignment The Voice Of The Customer	Group	9
4848E26	subgroup 482E6	Subgroup	9
482E78CPB	Professional Empowerment Check 7/8	Course	1
482E78RD	Project The Voice Of The Customer	Course	8
4848E27	Tasks Quarters 7/8	Group	9
4848E27	subgroup 482E7	Subgroup	9
482E78BE	Task Economics 7/8	Course	2
482E78BIS	Task Business Information Systems 7/8	Course	2
482E78COM	Task Communication 7/8	Course	1
482E78DO	Task Corporate Social Responsibility	Course	1
482E78ENG	Task English 7/8	Course	1
482E78HRM	Task HRM	Course	1
482E78RECH	Task Law 7/8	Course	1
4848E28	Exams Quarter 7	Group	5
4848E28	subgroup 482E8	Subgroup	5
482E78B2B	Exam B2B Marketing	Course	2
482E78M&T	Exam Research Methods & Techniques	Course	3
4848E29	Exams Quarter 8	Group	6
4848E29	subgroup 482E9	Subgroup	6
482E78SC	Exam Strategy & Change	Course	3
482E78STAT	Exam Statistics 7/8	Course	3

_48482E91	Free Credits Assignments	Group	1
48482E91	subgroup 482E91	Subgroup	1
482E78VS	Free Credits Assignment 7/8	Course	1

\*\*\*\*Students who started their internship in February 2022 or before.

Code****	Title	Category	WL
4848E316	IE&M year 3	Programme	60
4848E316	IE&M Y3	Group	60
4848E310	subgroup 48E310	Subgroup	59
483E01STG	Internship	Course	29
483E01MIN	Minor	Course	30
4848E320	subgroup 48E320	Subgroup	1
483E02PRT	Assessment (PET 2)	Course	1

\*\*\*\*\*Students who will start their internship from September 2022.

Code*****	Title	Category	WL
48E322	IE&M year 3	Programme	60
483ESHIP	Internship	Course	29
483EPREP	Internship preparation research	Xcourse	8,7
483EEXEC	Internship execution research	Xcourse	20,3
483E01MIN	Minor	Course	30
483E02PRT	Assessment (PET 2)	Course	1

\*\*\*\*\*Students who need to hand in a repair for Strategic project from study year 2022-2023, will be converted to programme 48BE422.

Code*****	Title	Category	WL
4848BE417	TB/IE&M year 4	Programme	60
484BE4FREC	The Fresh Connection	Course	1
484BE4KNOA	Knowledge area's	Course	6
484BE4SUCM	Supply chain management	Xcourse	1,5
484BE4INTB	International Business	Xcourse	1,5
484BE4TECE	Technology & Engineering	Xcourse	1,5
484BE4STRA	Strategy	Xcourse	1,5
484BE4THEI	Themes & Integration	Course	2
484BE4STPR	Strategic project	Course	18
484BE4PRFR	Preparation final research	Course	2
484BE4PERD	Personal development (PET 3)	Course	1
484BE4BADR	Bachelor's Degree research	Course	30
Code	Title English	Category	WL
48BE422	TB/IE&M year 4	Programme	60
484BE4FREC	The Fresh Connection	Course	1
484BE4KNOA	Knowledge area's	Course	6
484BE4SUCM	Supply chain management	Xcourse	1,5
484BE4INTB	International business	Xcourse	1,5
484BE4TECE	Technology & engineering	Xcourse	1,5
484BE4STRA	Strategy	Xcourse	1,5
484BE4THEI	Themes & integration	Course	2
484BE4PROJ	Strategic project	Course	18
484BE4SCAN	Strategy scan	Xcourse	7
484BE4ORAL	Oral Assessment	Xcourse	5,5
484BE4DEPL	Deployment report	Xcourse	5,5
484BE4PRFR	Preparation final research	Course	2
484BE4PERD	Personal development (PET 3)	Course	1
484BE4BADR	Bachelor's Degree Research	Course	30

## **Annex 4. Competence profile IE&M**

## The profile of the IE&M programme in Eindhoven<sup>13</sup>

This section outlines the complete competence profile. It consists of eight competences. For each competence, the relevant work activities of an industrial engineer are given. In addition, a number of accompanying behaviour characteristics are given for each competence. These more specifically define the activities associated with a particular competence.

### 1. Analysis

The analysis of an industrial engineering question/issue comprises the identification of the problem or customer need, the consideration/balancing of possible design strategies / proposed solutions and the unambiguous charting out of the requirements / objectives / parameters. Structuring data, i.e. organising, modelling and applying a systems approach, is an element of analysis. Abstraction, i.e. making connections, integrating previous insights and distinguishing between primary and secondary issues, is also part of this. Finally, it is important that a helicopter view be continuously maintained. Parameters relating to (commercial) economics & commerce, man & society, health, safety, environment & sustainability, etc. are also considered.

The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. selection of relevant aspects in respect of the question/issue
- b. indication of the possible influence on commercial, social and specialist subject-related aspects
- c. formulating a clear problem outline, objective and assignment according to the wishes of the client
- d. drawing up a schedule of (technical and non-technical) requirements and laying down those requirements
- e. modelling an existing product, process or service.

### 2. Design

Implementing an industrial engineering design and in that process being able to collaborate with engineers and non-engineers. The design to be realised may be for an organisation, a process or a method, and may consist of more than simply the technical design, whereby the industrial engineer has a sense of the impact of his design on the social environment, health, safety, the environment, sustainability (e.g. cradle-to-cradle) and commercial considerations. In drawing up his design, the industrial engineer makes use of his knowledge of design methods, and is able to successfully apply that knowledge. The design to be realised is based on the schedule of requirements and forms a complete and correct implementation of all requirements imposed. The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. the ability to elaborate and select a concept solution on the basis of the requirements imposed
- b. producing detailed designs according to the selected concept solution
- c. the ability to take account of the manufacturability and testability of the design
- d. verifying the design according to the schedule of requirements
- e. selecting the correct design tools
- f. drawing up the documentation for the product, service or process

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<sup>13</sup> This profile is based on the national profile *Bachelor of Engineering, een competentiegericht profielbeschrijving, Domein HBOEngineering* (Bachelor of Engineering, a competence-based profile description, Domain higher professional education - Engineering), November 2012.

### 3. Realisation

The realisation and handover of a product or service or the implementation of a process that fulfils the requirements imposed (or preparing an implementation plan). The industrial engineer is also capable of overseeing the (often non-technical) consequences of his work (i.e. the changes), for example in respect of culture and ethics, the social environment and sustainability.

The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. making suitable use of materials, processes, norms and standards
- b. coordinated implementation of partial solutions
- c. verifying and validating the product, service or process in respect of the requirements imposed
- d. documenting the realisation process
- d. ensuring that a product, service or process operates ideally, taking account of aspects relating to safety, the environment, and technical and economic lifetime (i.e. MOTE).

### 4. Control

The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. delivering a contribution to control systems and/or maintenance plans, both corrective (monitoring, identifying and optimising) and preventive (anticipating)
- b. the ability to assess the performance of a product, service or process according to quality criteria
- c. the ability to provide feedback in response to changing circumstances and/or performance of a product, service or process

### 5. Management

The industrial engineer directs and orders organisation processes and the related staff with a view to achieving the objectives of the organisation component of the project of which he is in charge.

The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. organising a (sub)project: quantifying time and money, assessing and quantifying risks, drawing up project documentation and organising resources (human and material)
- b. monitoring and readjusting activities in terms of time, money, quality, information and organization
- c. task- and process-oriented communication
- d. supervising employees, encouraging cooperation and the ability to delegate
- e. communication and cooperation with others in a multicultural, international and/or multidisciplinary environment, and fulfilling the requirements imposed by participation in a labour organization.

### 6. Advice

The industrial engineer offers well-argued advice on the design, improvement or application of products, processes and methods.

The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. empathy with the position of the (internal or external) customer
- b. clarifying the needs of the client
- c. the ability to underpin advice with argument, and duly convince the client
- d. adequately maintaining relationships with clients.

## 7. Research

The industrial engineer demonstrates the ability to conduct a structured search for (theoretical) concepts and models in the literature. The definition and execution of measurements and collection of data in support of a concept or model. The optimization within given constraints (e.g. working with a simulation model). The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. collect data in a structured manner
- b. independently selecting (scientific) literature and own / other information sources for acquiring further in-depth knowledge of the question, thereby demonstrating the ability to validate the reliability of the various information sources
- c. summarizing and structuring the results in relation to the study question (or sub-question)
- d. reporting on the results according to the standards applicable in the professional field
- e. on the basis of the results obtained, critically analyzing the selected approach and issuing recommendations for follow-up study

## 8. Professionalism

Acquiring and maintaining the skills needed to be able to effectively implement the industrial engineering competences. These skills can also be applicable in a broader context. This includes maintaining an international orientation and the ability to place the latest developments, for example in relation to social standards, values and ethical dilemmas.

The industrial engineer demonstrates this competence according to the following behaviour characteristics:

- a. independently defining and executing a learning target and learning strategy, and feeding the result back to the learning target
- b. adopting a flexible approach in a range of professional situations
- c. when faced with professional and ethical dilemmas, making sound considerations and taking a decision, taking account of accepted standards and values
- d. the ability to offer and receive constructive feedback in respect of both behaviour and content
- e. the ability to reflect on own actions, thoughts and outcomes
- f. the ability to use a range of forms of and tools for communication in order to be able to effectively communicate in Dutch and English.

## Annex 5. Program of tests.

\*Weeknumbers are indicative. See recent information provided on the online learning environment and/or by lecturer

Code	Title	EC	Testform	Assessment individually / group	Scale				
<b>48E121</b>	<b>IEM Year 1</b>	<b>60.0</b>							
						<b>1<sup>st</sup> attempt*</b>		<b>2<sup>nd</sup> attempt*</b>	
481ECU-TA	<b>Culture Immersion - Task</b>	1.0	Task	Individual	0,1 – 10,0	Q1	W1	Q1	W10
481E1HP-PR	Project 1: The Product - Project	5.0	Project	Group	0,1 – 10,0	Q1	W8	Q2	W4
481E1PT-TE	Production Technology Quarter 1 Exam	2.0	Exam	Individual	0,1 – 10,0	Q1	W9	Q2	W4
481E1BD-TE	Business Economics Quarter 1 Exam	2.0	Exam	Individual	0,1 – 10,0	Q1	W7	Q2	W4
481E1WT-TA	Workshop Technology Quarter 1 Task	1.0	Task	Individual	0,1 – 10,0	Q1	W8	Q2	W4
481E1TK-TA	Drawing Technique Quarter 1 Task	1.0	Task	Individual	0,1 – 10,0	Q1	W9	Q2	W4
481E1BU-TA	Business Intelligence Quarter 1 Task	1.0	Task	Individual	0,1 – 10,0	Q1	W9	Q2	W4
						<b>1<sup>st</sup> attempt*</b>		<b>2<sup>nd</sup> attempt*</b>	
481E2MA-PR	Project 2: The Market (Business(re)modeling) - Project	5.0	Project	Group	0,1 – 10,0	Q2	W7	Q3	W5
481E2BR-TE	Business Economics Quarter 2 Exam	2.0	Exam	Individual	0,1 – 10,0	Q2	W6	Q3	W5
481E2BW-TE	Business Mathematics Quarter 2 Exam	3.0	Exam	Individual	0,1 – 10,0	Q2	W9	Q3	W5
481E2OR-TA	Organization&Management Quarter 2 Task	2.0	Task	Individual	0,1 – 10,0	Q2	W7	Q3	W5
481E2MV-TA	Corporate Social Responsibility (CSR) Quarter 2 Task	1.0	Task	Individual	0,1 – 10,0	Q2	W9	Q3	W5
						<b>1<sup>st</sup> attempt*</b>		<b>2<sup>nd</sup> attempt*</b>	
481E3PR-PR	Project 3: The Process (Cartonax-factory) - Project	5.0	Project	Group	0,1 – 10,0	Q3	W8	Q4	W4
481E3KW-TE	Quality management Quarter 3 Exam	3.0	Exam	Individual	0,1 – 10,0	Q3	W7	Q4	W4
481E3SY-TE	System Technology Quarter 3 Exam	2.0	Exam	Individual	0,1 – 10,0	Q3	W9	Q4	W4
481E3CC-TA	Communication Quarter 3 Task	1.0	Task	Individual	0,1 – 10,0	Q3	W7	Q4	W4

Code	Title	EC	Testform	Assessment individually / group	Scale					
481E3EG-TA	English Quarter 3 Task	2.0	Task	Individual	0,1 – 10,0	Q3	W9	Q4	W4	
						<b>1<sup>st</sup> attempt*</b>		<b>2<sup>nd</sup> attempt*</b>		
481E4DE-PR	Project 4: The Change (Culture and Change) - Project	5.0	Project	Group	0,1 – 10,0	Q4	W7	Q4	W10	
481E4OM-TE	Organization&Management Quarter 4 Exam	3.0	Exam	Individual	0,1 – 10,0	Q4	W9	Q4	W10	
481E4IS-TE	Introduction Statistics Quarter 4 Exam	2.0	Exam	Individual	0,1 – 10,0	Q4	W6	Q4	W10	
481E4ST-TA	System Technology Quarter 4 Task	1.0	Task	Individual	0,1 – 10,0	Q4	W7	Q4	W10	
481E4BI-TA	Business Intelligence Quarter 4 Task	1.0	Task	Individual	0,1 – 10,0	Q4	W9	Q4	W10	
	<b>Professional Empowerment Program**</b>						<b>1<sup>st</sup> attempt*</b>		<b>2<sup>nd</sup> attempt*</b>	
481ERE-TA	Professional Empowerment Program: Research - Task	4.0	Task	Individual	0,1 – 10,0	Q1/2/3/4	W10	Q2/3/4	W10	
481ERR-AS	Professional Empowerment Program: Reveal & Reflect (PET 1) - Assessment	5.0	Assessment	Individual	0,1 – 10,0	Q3	-	Q4	-	

\*\* see for more detailed information section 4.1.7 of Annex 1

Code	Titel	EC	Testform	Assessment individually / group	Scale				
4848E214	IEM Year 2 Prerequisite: Propaedeutic phase passed (D1)	60.0				1 <sup>st</sup> attempt*		2 <sup>nd</sup> attempt*	
482E56VB	Project Improve a company process	8.0	Project	Group					
482E56CPB	Professional Empowerment Check 5/6	1.0	Task	Individual	1,0 – 10	Q1	*	Q2	*
48482E2	Tasks 5/6	8.0							
482E56ABP	Task Analysing Company Processes	25%	Task	Individual	1,0 - 10	Q2	W3	Q2	W8
482E56BIS	Task Bedrijfsinformatie Systems 5/6	12.5%	Task	Individual	1,0 - 10	Q2	W5	Q2	*
482E56COM	Task Communication 5/6	12.5%	Task	Individual	1,0 - 10	Q1	W5/7	*	
482E56ENG	Task English 5/6	12.5%	Task	Individual	1,0 - 10	Q1	W9	*	
482E56MNGG	Task Management game	25%	Task	Individual	1,0 - 10	Q1	W8	*	
482E56RECH	Task Law 5/6	12.5%	Task	Individual	1,0 - 10	Q2	W3	Q2	W9
48482E3	Exams Quarter 5	7.0							
482E56BE	Business Economics 5/6 Exam	28.5%	Exam	Individual	1,0 - 10	Q1	W6	Q2	W6
482E56M&O	Management & Organization 5/6 Exam	28.5%	Exam	Individual	1,0 - 10	Q1	W10	Q2	W10
482E56OML1	Operations Management & Logistics 1 Exam	43%	Exam	Individual	1,0 - 10	Q1	W10	Q2	W10
48482E4	Exams Quarter 6	5.0							
482E56INKM	Purchasing Management Exam	20%	Exam	Individual	1,0 - 10	Q2	W10	Q3	W10
482E56NAT	Physics 5/6 Exam	20%	Exam	Individual	1,0 - 10	Q2	W6	Q3	W6
482E56OML2	Operations Management & Logistics 2 Exam	60%	Exam	Individual	1,0 - 10	Q2	W10	Q3	W10
482E56VS	Free Credits assignment 5/6	1.0	Task	Individual	1,0 - 10				

Code	Title	EC	Testform	Assessment individually / group	Scale				
482E78RD	Project Voice of the customer	8.0	Project	Group					
482E78CPB	Professional Empowerment Check 7/8	1.0	Task	Individual	1,0 - 10	Q3	*	Q4	*
48482E7	Tasks 7/8	9.0							
482E78BE	Task Economie 7/8	22.5%	Task	Individual	1,0 - 10	Q3	W7	*	
482E78BIS	Task Business Information Systemen 7/8	22.5%	Task	Individual	1,0 - 10	Q3/4	W5/3	*	
482E78COM	Task Communication 7/8	11%	Task	Individual	1,0 - 10	Q4	W8	*	
482E78ENG	Task English 7/8	11%	Task	Individual	1,0 - 10	*			
482E78DO	Task Corporate Social Responsibility 7/8	11%	Task	Individual	1,0 - 10	*			
482E78HRM	Task HRM	11%	Task	Individual	1,0- 10	Q3	W7	Q3	W10
482E78RECH	Task Law 7/8	11%	Task	Individual	1,0 - 10	Q4	W4	Q4	W9
48482E8	Exams Quarter 7	5.0							
482E78B2B	B2B Marketing Exam	40%	Exam	Individual	1,0 - 10	Q3	W6	Q4	W6
482E78M&T	Research Methods & Techniques Exam	60%	Exam	Individual	1,0 - 10	Q3	W10	Q4	W10
48482E9	Exams Quarter 8	6.0							
482E78SC	Strategy & Change Exam	50%	Exam	Individual	1,0 - 10	Q4	W10	Q1	W0
482E78STAT	Statistics 7/8 Exam	50%	Exam	Individual	1,0 - 10	Q4	W6	Q1	W0
482E78VS	Free Credits assignment 7/8	1.0	Task	Individual	1,0 - 10				

Code	Title	EC	Testform	Assessment individually / group	Scale				
<b>484E322</b>	<b>IEM Year 3</b>	<b>60.0</b>							
483ESHIP	Internship Prerequisite: <b>40 EC of Year 2 (D2)</b>	29.0	Task	Individual	1,0 - 10	See manual in Canvas and this <a href="#">link</a>			
483EPREP	Internship Preparation Research	8.7	Task	Individual	1,0 - 10				
483EEXEC	Internship Execution Research	20.3	Task	Individual	1,0 - 10				
483E02MIN	Minor	30.0	Task/Exam	Individual	1,0 - 10				
483E01PRT	Assessment 2 (PET2)	1.0	Assessment	Individual	1,0 - 10	See information on Canvas			

Code	Title	EC	Testform	Assessment individual / group	Scale	
<b>48BE422</b>	<b>TB/IEM Year 4</b> <b>Prerequisites: Year 2 completed, only 'free credits' and at most one exam or task may still be open, Minor completed and Internship achieved (D3)</b>	<b>60.0</b>				This study program, 13/14, is offered twice a year: Edition Fall and Edition Spring Per edition two attempts can be made for each component
484BE4FREC	The Fresh Connection	1.0	Task	Group	1,0 - 10	
484BE4KNOA	Knowledge area's	6.0				
484BE4SUCM	Supply chain management	1.5	Task	Group	1,0 - 10	
484BE4INTB	International Business	1.5	Task	Group	1,0 - 10	
484BE4TECE	Technology & Engineering	1.5	Task	Group	1,0 - 10	
484BE4STRA	Strategy	1.5	Task	Group	1,0 - 10	
484BE4THEI	Themes & Integration	2.0	Task	Individual	1,0- 10	
484BE4STPR	Strategic project	18.0	Project	Group	1,0 - 10	
484BE4SCAN	Strategy Scan	7.0	Task	Group	1,0 – 10	
484BE4ORAL	Oral Assessment	5.5	Task	Group	1,0 – 10	
484BE4DEPL	Deployment Report	5.5	Task	Group	1,0 - 10	
484BE4PRFR	Preparation final research	2.0	Task	Individual	1,0 - 10	A student may start in each quarter with this component. In each quarter two attempts can be made.
484BE4PERD	Personal Development (PET 3)	1.0	Assessment	Individual	1,0 - 10	See information on Canvas
484BE4BADR	<b>Bachelor's Degree Research</b> <b>Prerequisites: Achieved PET 2 and, of program 13/14: 'Strategic project' and 'Preparation final research' (D4)</b>	30.0	Task	Individual	1,0 - 10	See for information this <a href="#">link</a>