# Bijlage 4 Beschrijving opleidingsminoren FHTenL 2019-2020_1.0

## Inhoud

# Logistics Event Management
## Minor regulation 2019-2020

Terug naar begin

**1. Name minor: Logistics Events Management**

**2. English name: Logistics Events Management**

**3. Minor content**

*Introduction*

Logistics and logistics planning has grown into a widely accepted and acknowledged entity within most of the companies worldwide and is recognized as a value adding way of thinking. Talking about Logistics is like referring to the development of globalisation and the accretion of prosperity which results from the growth of the worldwide goods and information flow.
An established logistics planning is not only perceived as essential within the automotive, retail or sea freight sector but it is also the base of every successful event.
An event can be seen as “an organised occasion such as a meeting, convention, exhibition, special event (…)” (Industry Glossary of terms, 2003).

The Minor Logistics Events Management is meant for students who would like to gain basic knowledge and skills in the field of Events Planning and therefore broaden the personal perspective beyond the topics of the regular logistics study. Not only will students learn about the theoretical context but will be able to apply their knowledge in practice as well.

*Goals*

At the end of the Minor Logistics Event Management students:

- know all relevant factors and players in organizing an event
- develop a creative concept for an event
- construct a thorough budget for an event
- set up and execute a marketing- and communicationplan for an event
- acquire sponsoring or other funds for an event
- set up and execute an operational planning for a new or existing event
- evaluate the event itself and the role of the student(s) in organizing an event

*Summary*

The Minor Logistic Events Management gives the students the chance to gain insight into the topic, which is taught during the general logistics study. Students will experience an enlargement of their perception which will also add value to their major studies. They will also have the chance to apply their developed strengths during a life event.

**4. Overview of the courses in the minor** *(see article 12, general section TER)*

The total work load for this minor is 30 European Credits (EC), duration is 1 semester. The minor consists of the following modules:

Description of the modules:

| *Modules* | *Description* | *studyload in hours* |
|---|---|---|
| Finance- It’s all about the money | Within this module you’ll learn about budgeting and about controlling receipts and payments.<br>Together you’ll work on questions like “Can we spend this money for a certain activity?” or “How can we allocate costs in a rational and reasonable way?” | 56 |
| Promotion and Design- Discover your creative nature | In order to make an event successful it is important to think about an effective events promotion. “How can I make people attend my event?”. Being creative in terms of developing an attractive and eye catching flyer as well as a mind-blowing slogan is the essence of successful promotion and thus a guarantee for a filled location? | 56 |

| | | |
|---|---|---|
| Web design- Present yourself! | A website is your business card. It represents your event to stakeholders such as sponsors, participants or financiers. When setting up a website it is important to have a goal in mind. It has to follow your promotion strategy. Building a website which is 'consumer friendly', which means easy to handle through a well-arranged structure, shows professionalism and forms a first stepping-stone towards the desired attendance. "But how does it work?", "Which tools can be used"? You'll learn about the techniques for creating an attractive website. | 112 |
| Sponsoring- The art of raising funds | It's not necessary to explain the importance of funds for the organisation of an event. But how do you raise the money you need? In this module you'll learn about the right tactics and strategies to convince potential sponsors to support your event financially, with either goods or services you need. Times are tough and everybody seeks the biggest benefit for himself. So how can somebody benefit from sponsoring your event? What is your 'unique selling point'? What makes you special? Learn how to promote and sell your event to the so called "donors". | 112 |
| Soft Skills- The subtle guarantors for success | Having meetings, working together with people, or solving conflicts are all part of the organisation and execution of an event. During the events planning you'll have contact with a lot of people: stakeholders, students, teachers. How can you communicate with them in an appropriate way? How do you present your vision and goals so that others would like to participate in your event? Having and applying Soft Skills are the essence of inter-personal communication and are absolutely vital for a successful events manager. | 112 |
| Administration- Keep everything running smoothly | In this module three stages can be differentiated: the planning, the life event and the closure of the event. How can a work schedule be generated? How can I plan my resources right? An events organization wouldn't work without a good administration. The administration doesn't end with the event. There is always a closure. You'll learn about how to record and monitor all tasks which have to be done during the listed stages. | 252 |
| Project | The project is the central part of the "real-life" implementation of the theory-modules. In the project the students have to organize an event from scratch. All factors presented in the theory-modules have to be taken into account and will result in an actual event organized and run by the students. | 140 |

For each of these modules, more detailed information is available in a separate module description.

**5. Procedure for enrolment for the courses of the minor**
Minor enrolment follows regular procedure, as stated on the Fontys website.

**6. Tests and procedure for enrolment for the tests** *(see article 18 & 22, general section TER)*
Students don't have to enrol themselves for the tests.

| *Modules* | *Assessment* | *individual/ group** | *Assessment scale* |
|---|---|---|---|
| Finance | Hand in assignment + presentation | group work | 1-10 |
| Promotion and Design | Hand in assignment + presentation | group work | 1-10 |
| Web Design | Presenting Web site | group work | 1-10 |
| Sponsoring | Hand in assignment + presentation | group work | 1-10 |
| Soft Skills | Portfolio, Assignment | Individual | 1-10 |
| Administration | Hand in assignment + presentation | group work | 1-10 |
| Project | Live performance | Individual | 1-10 |

*every module consists of group work and individual work.

**7. Examination of the minor** *(see article 19, paragraph 3, general section TER)*
All 7 parts of the minor (modules mentioned in article 4) are graded by a grade between 1 (worst) and 10 (best), rounded on 0,5 points. The grading method within the Minor parts will be published by the module lecturer and explained during the first lesson. For passing the Minor, there has to be a score of minimally 5.5 per module. The calculation of the total score will be weighted to the studyload. During the final evaluation at the end of the minor (after the event has taken place) a peer-evaluation will take place as well. This can lead to a -1/+1 on the final note.

A student will only get credits assigned as soon as he brings all above mentioned (article 4) modules to an end successfully, so either 30 EC or no credits at all (0 EC's) are assigned.

**8. Examencommissie** (*article 38, general section TER)*
The examination board for this minor is represented by the examination board of Fontys Hogeschool Techniek en Logistiek Venlo (fhtenl-excie@fontys.nl).

**9. Validity period**
This information remains valid for the duration of the 2019-2020 Academic Year.

**10. Entry Level minor**
Students must have successfully completed their propaedeutic year. If the propadeutic year is not (yet) completed, students have to get permission by the examination board to enrol in the minor.

**11. Accessability**
This minor is not accessible for students who can not show the entry level. Participation during the live event, which will take place in the week of August 20th 2018, is mandatory.

**12. Contact**

- This minor is offered by Fontys Hogeschool Techniek en Logistiek Venlo.

| | | |
|---|---|---|
| 1 | Name of minor | Logistics Event Management |
| 2 | Organising institute | Fontys Hogeschool Techniek en Logistiek |
| 3 | Managing Director | Mr. J.A.H. Aarts |
| 4 | Minor Coordinator | Mr. J. Vos<br>E: jaap.vos@fontys.nl<br>T: 0031 (0)8850 79833 |
| 5 | Language | English |
| 6 | Location | Fontys Hogeschool Techniek en Logistiek<br>Tegelseweg 255<br>Venlo |
| 7 | Period | February 2019 – August 2019 (requirement: min. 10 registrations) |

**In terms of participation and completion of their minors, students will not be required to satisfy any other requirements than those as hereby determined in these Minor Regulations.**

# Minor E-Preneurship
# Minor regulation 2019-2020

Terug naar begin

**1. Name Minor**
Minor E-Preneurship

**2. English Name**
Minor E-Preneurship

**3. Minor content**
"E-Preneurship (E-Commerce & E-Fulfilment)" is a bachelor minor offered by the Institute of Logistics and Technology at Fontys University of Applied Sciences in Venlo since the beginning of 2016. The minor is developed in close cooperation with the Logistics Centre of Expertise Limburg and the E-academy of Thuiswinkel.org, also certifying the minor within their E-Academy programme.
Today's economy is rapidly changing because of the strong growing E-Commerce businesses. Well known examples are Amazon, Zalando, Spotify, Alibaba or Bol.com. The impact of this development is staggering. However despite of these big players, a lot of successful E-Commerce companies are start-ups and at the same time many traditional companies are exploring opportunities to integrate E-Commerce into their business model. A lot of E-Commerce activities of traditional companies are not making any profit, which is why a lot of attention needs to be paid to the execution of physical goods flows in E-Commerce. A key area of attention in E-commerce is therefore the field of E-Fulfilment (*E-Commerce logistics*).

*Minor E-preneurship*
During the minor, students will learn how to improve formerly mentioned core processes in E-Commerce & E-Fulfilment and to acquire entrepreneurial competences that help them in making their own online business successful. These competences are inevitable in case of future independency (entrepreneurship) and highly appreciated in corporate management positions (intrapreneurship). Entrepreneurship involves developing a (new) venture. Intrapreneurship, also known as corporate entrepreneurship or corporate venturing, is the practice of developing a (new) venture within an existing organization. Both types of venture creation are focused on exploring new opportunities, business building, in order to create economic value and therefore are of key economical and social importance in modern society.

Therefore, the minor is based upon the three fundamental subjects:

1. E-Commerce *"understanding online commerce and relevant activities"*
2. E-Fulfilment *"creating efficient logistics for online commerce"*
3. Entrepreneurship *"being capable of starting an own online business"*

The *introduction phase* (week 1-10) provides students with the theoretical basis required to gain more in-depth knowledge about E-Eommerce & E-Fulfilment. Besides this, students get to know their 'entrepreneurial self' by means of a personality test. The results of this test are then used as an aid to provide entrepreneurship oriented knowledge. Subsequently, students apply the knowledge obtained, as well as skills competences in the *advanced phase* (week 11-20) by carrying out projects for real E-Commerce companies. In this phase, students are guided by an internal (teacher) and external (company) coach in individual projects. Inspiring guest lecturers by intrapreneurial specialists in E-Commerce and E-Fulfillment are provided in this phase as well to help students obtain practical knowledge with regards to relevant subjects.
Therefore, minor students from diverse domains like Mechatronics, Industrial Product Design, Information technology, Logistics and other economic studies acquire additional knowledge beyond the scope of their own major. Students from these different majors and different cultural backgrounds will work in interdisciplinary group settings. The official language is English in order to enhance intercultural skills. Furthermore students obtain more self-awareness, learn from each other's strengths and work in individual weaknesses.

For half a year the students will be fully occupied. Therefore the minor is a so called 'block minor'.
The required study time is 40 hours per week. Approximately on average 12 contact hours and 28 hours of self-study and group work have to be taken into account. In total 30 EC's are awarded for the completion of this minor.

*Goals*
At the end of the minor students will have broader knowledge about E-Commerce & E-Fulfilment related subjects, understand the relation between these subjects, and can apply their knowledge in real projects within e-commerce companies.
In doing so, they can integrate these fields of knowledge by means of investigating, analysing, improving and developing (new) business opportunities within an international E-Commerce comany. Ultimately, a written business plan is presented, with convincingly argumented and defended results.

*Summary*
The minor offers a framework in which students become E-Commerce & E-Fulfilment professionals and acquire valuable entrepreneurial competences that are in line with the expectations of industy. Aiming at future entre- or intrapreneurial aspirations, the minor also enhances the students' creativity, flexibility, reliability, responsibility and guides them towards acting professionally and perform effectively. These are important requirements for achieving success in the emerging world of e-commerce.

**4. Overview of the courses in the minor** (see article 12, general section TER)
The total workload for this minor is 30 European credits (ECs), duration is 1 semester. The minor consists of the following modules:

| ***E-Fulfilment / E-Commerce*** | | ***Entrepreneurship*** |
|---|---|---|
| ***Introduction phase*** | ***Advanced phase*** | ***Introduction & Advanced phase*** |
| Introduction to E-Commerce | Cross-border E-Fulfilment | Business plan writing |
| E-Marketing and Sales | Innovation concepts in E-Commerce | ICT and E-Commerce |
| E-Procurement **or*** Traffic channels and internet marketing | Utilizing big data to optimize the E-Commerce Supply Chain | Research methods and business planning |
| Assortment, Buying & Merchandising | Optimizing and managing the Last-Mile | E-Business finance |
| E-Warehousing | Legal, customs and compliance | Skills & Entrepreneurial behaviour |
| Transportation, Delivery & the Last-Mile | Managing hyper growth in a physical E-Commerce environment | |
| Returns Management | Mechanization versus HR planning – How to manage peak periods? | Workshop techniques |

*****elective based on choice and availability

**5. Procedure for enrollment of the minor**
Minor enrolment follows standard procedures as stated on the Fontys website. There is no required procedure for enrolment for the individual courses of the minor.

**6. Tests and procedure for enrolment for the tests** (see article 18 & 22, general section TER)
The examination prodedure is defined as follows:

**Introduction Phase:** WL= Workload

| **Nr** | **Part** | **Assessed by** | **Individual/group** | **Grading** | **WL** |
|---|---|---|---|---|---|
| 1 | Written exam courses Introduction Phase (w/o Skills) | Lecturers | Individual | 1 -10 | 6 |
| 2. | Skills assignments | Lecturer Skills | Individual | 1-10 | 2 |

**Advanced Phase:**

| **Nr** | **Part** | **Assessed by** | **Individual/group** | **Grading** | **WL** |
|---|---|---|---|---|---|
| 3. | Projectplan | Coaches / Lecturers | group | O/ V | 1 |
| 4. | Webshop assignment | Lecturer ICT | group | 1 -10 | 1 |
| 5. | Business Plan | Examiner / Lecturer(s) + ext. Advisor(s) | group | 1 -10 | 12 |
| 6. | Final Assessment | Examiner(s) | group/ind. | 1 -10 | 8 |
| | Presentation & Defense | Examiner(s) + ext. Advisor(s) | group/ind. | 1 -10 | |

| | | | |
|---|---|---|---|
| Competences 2-5 in Advanced Phase | Examiner(s) & + ext. Advisor(s) | individual | O/ V |

In the examination week at the end of the introduction phase the students will be assessed individually. The result(s) of this integral, written exam need to be graded with at least 5,5 or V (sufficient). The students that do not pass this assessment are given a re-assessment at the beginning of the advanced phase. At the end of the advanced phase the students have to hand in a business plan, complete a webshop (building) assignment and will be assessed both as a group and individually based on their defense. In this final (integrated) assessment the competences 2 – 5 will also be graded: management, cooperation, communication and professional performance. More detailed information about these competences can be found on the minor assessment form(s) published before the start of the advanced phase.
E-Preneurship programme matriculation is seen as a sign of commitment and dedication for course content. It is therefore assumed that the student will actively participate in both formative and summative assignments of the minor and its modules, and will take an active and responsible role with regards to the execution of any assignment. Excessive absence or lack in participation within a module or overall can therefore result in serious consequences. As one of the core pillars that the minor rests upon is entrepreneurial behavior, dedication and formally correct behavior with peers are seen as essential parts of the (entrepreneurial) skills competences mentioned. A lack thereof may result in an “O” (fail) for one or more skills indicators and hence not passing the minor.

**7. Examination of the minor** (see article 19, paragraph 3, general section TER)
All examined (main) parts of the minor are graded between 1 (worst) and 10 (best), rounded to one decimal, or are graded with O (insufficient) or V (sufficient). The grading method within the minor parts will be explained further by the lecturer(s) during their first lecture.
The final minor grade is determined as follows: The grade of the integral exam at the end of the introduction phase weighs 30% (see Nr. 1 section 6). 10% are determined by the grading for skills assignments (Nr. 2). The grade of the student’s business plan (Nr. 5 & 6) weighs 55% of their final grade, including presentation and defense of said plan. Another 5% result from the webshop construction assignment executed within the advanced phase (Nr. 4).

For passing the minor, there has to be a score per part of minimally 5,5 or a V (sufficient), for any of the parts mentioned in section 6 of this document. The final grade will be rounded on 1,0 points. Students that do not pass will be offered a retake (assessment) or a repair (assignment). A student will only obtain the credits assigned once he brings all above mentioned parts to an successful end, so either all (30 EC’s) or no credits (0 EC’s) are assigned.

**8. Examination board** (article 38, general section TER)
The examination board for this minor is represented by the examination board of Fontys Hogeschool Techniek en Logistiek Venlo (fhtenl-excie@fontys.nl)

**9. Validity information**
This information is valid for the duration of the 2019-2020 Academic Year.

**10. Entry Level minor**
Students must have successfully completed their propedeutic year. If the propedeutic year is not (yet) completed, students have to get permission from the examination board of their own institute to enroll for the minor. It might be difficult for the latter students to pass the minor as basic understanding of companies, process optimization and efficiency are required. Therefore 3rd year students are advised to have passed their internship before enrollment. Furthermore, sufficient knowledge of the English Language is important (>B1 level).

**11. Accessability**
The Minor is accessible for all students of the bachelor majors of Fontys Hogeschool Techniek en Logistiek in Venlo. Students entering from other institutes/studies are required to request permission by the examination board of their study before participating. This, even if these studies are (international) business related studies that align with the minor perfectly based on content.
After this the student is able to enroll by means of *ProgRESS*, if he has got acces himself or if not, he will be enrolled through the minor-coordinator.

**12. Contact**
Executing institute is the Fontys University of Applied Sciences (Fontys Hogeschool Techniek en Logistiek) in Venlo. For further information contact the minor coordinator:
Ken R. Zschocke, k.zschocke@fontys.nl, +31 (0) 8850 76790

In terms of participation and completion of their minors, students will not be required to satisfy any other requirements than those as hereby determined in these Minor Regulations.

# High Tech Agro Systems
# Minorregeling – 2019-2020

Terug naar begin

**1. Name of minor: A-SYSTEMS; High Tech Agricultural Systems**

**2. English name: A-SYSTEMS; High Tech Agricultural Systems**

**3. Minor content**

*Introduction*
The agricultural sector is considered to be one of the most dynamic sectors in the world. For example, the sector has been highly professionalised, chains have become shorter and the market has become increasingly global. In addition, national and international standards, regulations and legislation change.

The government and the business community have jointly identified nine sectors that (coincidentally or not?) have a strong link with the agricultural sector. These are the so-called top sectors in which the Netherlands is strong worldwide. The top sectors were chosen because of their strong international position, high knowledge intensity and the contribution they make to solving social issues. The nine top sectors are: Agri&Food, Chemistry, Creative Industry, Energy, High Tech Systems & Materials, Life Sciences & Health, Logistics, Horticulture & Raw Materials and Water.

Source: www.topsectoren.nl

The top sector Agri&Food is an essential and prominent part of the Dutch economy. This internationally leading sector comprises various (vegetable and animal) food chains with different links in each chain, such as the supply industry, basic materials, primary production, processing (food) industry, trade, retail and out of home sector and, finally, consumers at home and abroad.

In addition to the national level, the top sectors are also represented at the regional level. The Venlo region has traditionally been strong in the manufacturing industry, agro-business and logistics services. Especially in this region there are many companies that produce high quality technological products. In addition to the high technological character of the region, agriculture is also well represented. Both the plant sectors (e.g. horticulture and arable farming) and the animal sectors (dairy farming and intensive livestock farming) are flourishing in the so-called Greenport of Venlo. It is undeniable that agricultural businesses and technology are closely linked. The sector is well on the way to deploying smart technologies more and more. The minor "A-SYSTEMS; High Tech Agricultural Systems" addresses these challenges that bring the two sectors together in the field of new and smart applications in the technological field, so that the innovations will actually lead to value creation. Get to know the agro-technical Netherlands!

Students who choose this minor take part in technological development at the interface of biology and technology, which must also fit in with (agricultural) companies. In principle, this development is about innovations that lead to more profit, better quality and/or lower costs, but also more knowledge! The emphasis is often on the actual and responsible introduction of new technology in practice. Particularly in the cultivation and production systems, applications are sought in the field of harvesting systematics, climate technology, lighting, vision and robotics, heat and moisture control, geothermal technology, automatic recognition of flowering levels.

In this minor, students will make the connection between the world of biology, the world of technology and the world of business administration, see Figure 1. The still independent biological systems and the technical systems will be linked and influence each other with the aim of gaining more knowledge of the biological world on the one hand and making the biological world function more 'optimally' on the other hand. The end product must be applicable in the current and/or future agro-business where

knowledge is gained from the collected data in order to achieve optimal growth of crops and animals by means of stimuli. The Committee of the Regions believes that it is important not to lose sight of ethics in this context.

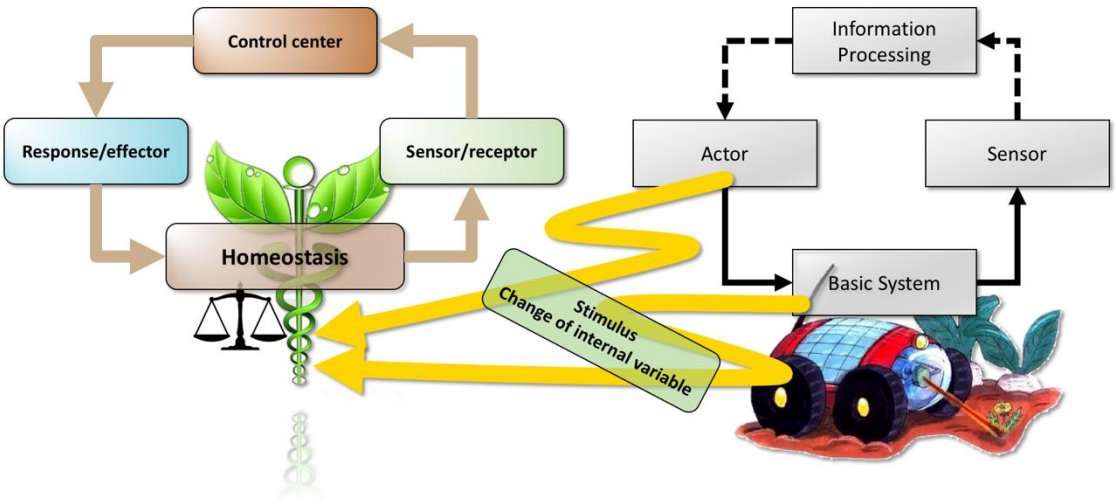



*Figure 1: Connection between the worlds [source Frank van Gennip]*

Students develop their own studies with passion and talent. They are stimulated to rise above themselves in one or more themes in order to earn a place in the professional field. The student creates his own path!

*Summary for Diploma Supplement*
The student knows the agrifood sector from a biological and technological point of view. He knows how to measure certain parameters of plants and/or animals and how to regulate the environment in order to influence the growth process and/or behaviour.
Within the minor, the student has made the link between in-depth theoretical technical knowledge and the agrifood practice and is able to advise the client on the use and application of techniques on the farm in the agrifood sector on the basis of experiments, research and prototypes.

**4. Overview educational activities minor**

The total study load for this minor is 30 European Credits (EC), the duration is 1 semester.
During this minor, the student himself is in charge. He decides for himself what has to be learned and in what way. In 20 weeks, the student will work on various aspects and assignments in order to develop himself as a link between agriculture and technology in the business community.

The learning outcomes of this minor are:

- The student is able to use his/her biological and technological knowledge to make an analysis of an issue and to provide advice and a solution.
- The student is able to give a well-founded vision on technological developments that can be applied in the agricultural sector and can make a well-considered assessment of the impact on business and society.

In this minor, the project is central. The student directs his own learning path by choosing specific theoretical modules and practical skills.

**4.1 Project**

In this minor the student works on his future as a professional. The project helps the student to develop, work and communicate in a real-life professional setting. It also prepares for the start of a career or a master's programme.
The aim of the project is to gain insight into the future professional role and to gain a broader knowledge of the technique applied in a biological environment. This is achieved by in-depth study of the assignment/problem definition and by collaboration with field experts. The study of literature is of

course part of the project. In this project the skills in the field of planning, cooperation, analysis, communication skills etc. are evaluated.
The student is part of a multidisciplinary team and together the entire project is planned, executed and documented. At the end of the project, each student also delivers an individual product.
There is no fixed timetable. The entire project is planned by the project group. The group will have to anticipate supervision and required knowledge!

Deliverables:

- Action plan
- Project plan;
- Project documentation;
- Individual product;
- Presentation on knowledge sharing day.

### 4.2 Supporting courses

With the help of a coach, students set a course to prepare for a job in the High Tech Agricultural Sector. The student's interest and passion can play an important role in this. The student works together with other students with similar passions. This strengthens, motivates and challenges!

Student teams are being formed. The project will be carried out jointly and the subjects of the required knowledge will be determined. The personal interpretation of the minor depends on the student's own goals, focused on content, skills and attitude. The specific curriculum is expressed in a personal document that also serves as input for the knowledge assessment.

Experts can be 'hired' for the duration of the entire project. During the first week, experts (at Fontys and at the HAS) will give a pitch on themes, experiments, projects, etc. The students will get to know the experts and their fields of expertise, so that they know for which subjects they should be with whom.
Expertise in the biological and technological field is available in half-day periods to be determined.

In the initial phase of the minor, a project is chosen together with the project group. Subsequently, expert meetings will be scheduled in the first weeks to discuss the plans, ask questions and above all get inspired. The project group will work on a project plan in the first weeks.

### 4.3 Personal development

There's a lot of time for students to gain knowledge. Each student has to make an individual action plan on how he will spend his time this semester. Together with the coach it is determined in which area the student will specialize. This can be a subject related to the project, but can also be a subject you are personally interested in.
The topics must be related to Tech meets Agro.

Deliverable: Action Plan

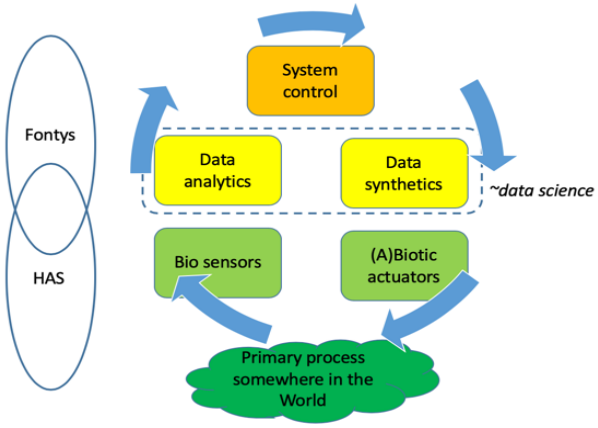
- How are you going to specialise and in which subjects (seminars/conferences, real life cases, excursions, discussion with experts, literature review, etc);
- Personal development: which skills do you want to develop and how do you want to achieve this (measurable?);
- Timetable.

The action plan must be approved by the coach (pass/fail).
Once the action plan is approved, the student and his project group are ready for a nice trip! Every week, time is reserved to hire experts and the coach will accompany the project group during this trip.

The most important themes for the supporting courses are indicated below. This is not exhaustive and the themes depend on project content and personal interest.

- Plant science Physiology, anatomy, photosynthesis, anatomy and morphology, soil cultivation;
- Animal science Physiology, anatomy, behaviour and nutrition and health;

- Bio sensor — Detecting the presence of chemicals on living organisms or biological molecules;
- Abiotic actuator — Encouraging non-living chemical parts to influence living organisms;
- Data analytics — Big Data, Data Conversion, Data Clustering and Classification, hyperspectral, data intensieve sensoren/actuatoren, omics;
- Data synthetics — Big data, motor babbling, orchestration of multiple and possibly heterogeneous actuations (e.g. movement), data intensive actuators, omics;
- Ethics — Philosophy that deals with the critical reflection on the right actions;
- Machine vision — The camera as a sensor, image processing algorithms, recognition, exposure;
- Robotics — Field of robotics, types, species, kinematics, programming, tools;
- System engineering — Systems Engineering is a holistic and interdisciplinary approach/methodology to enable the realization of successful systems. The intended system integrates, among other things, the above-mentioned themes as links in a cyclical chain that aims to optimise the primary business process in the outside world, see Figure 2.




*Figuur 2: System Engineering, connecting themes [source Jan Jacobs]*

### 4.4 Knowledge sharing day

More information about this knowledge sharing day will follow during the minor.

### 4.5 Assessment

In this minor, each student is assessed on 6 different aspects, based on the triangle of knowledge, skills and attitude, see Figure 3. See Table 1 for these different aspects.

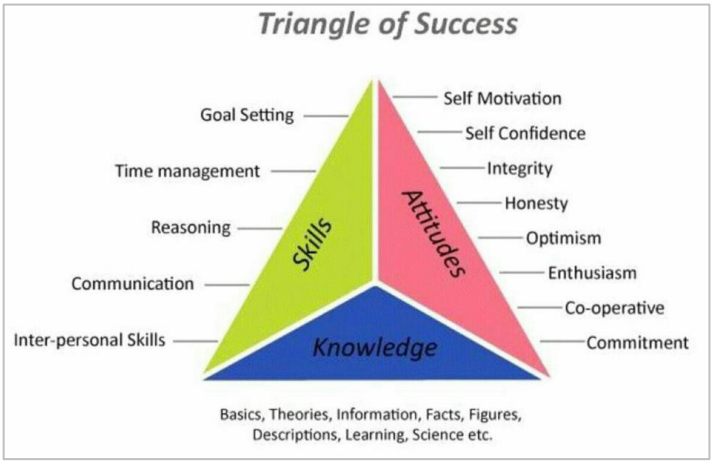



*Figure 3: Success triangle [source Lyman Macinnis]*

*Table 1: Assessment aspects with their weights*

| | | | |
|---|---|---|---|
| Action Plan | Individual | See par. 3.1, app. 1 and meeting with coach | pass/fail |
| Project plan | Group | See par. 3.2 and meeting with teacher | pass/fail |
| Project result | Group | At the end of the project, the project group documents the results achieved and the working method. | mark (40%) |
| Knowledge sharing Day | Individual | More information will be provided during the minor. (If necessary, an experience day in the meantime. ) | pass/fail |
| Knowledge Assessment | individual | At the end of the semester there is an individual assessment. The student presents his or her project work for 10 minutes and will then be interviewed. For this, the student has to obtain at least a 5.5. | Mark (30%) |
| Professional attitude | Individual | The student must act professionally and show the corresponding behaviour and attitude. Organization, prioritization of own work, high quality of delivered work must meet agreed goals. The student must commit to their own learning and development and take action to achieve learning and development goals. He has to keep a logbook and write a self-reflection. | Mark (30%) |

The table below shows the *study load of* the various modules.

*Table 2: ECTS schedule (30 ECTS in total)*

| **20 weeks (term 1 and term 2)** | **ECTS** | **SBUs (study hours)** |
|---|---|---|
| Project (in groups) | 15 | 420 hours = 21 hrs/week |
| Supporting courses (theory, communication & statistics) | 13 | 364 hours = 18 hrs/week |
| Knowledge sharing day (incl. preparations) | 1 | 28 hours |
| Assessment of knowledge (incl. preparations) | 1 | 28 hours |

## 5. Application for educational activities minor

Registration for the minor follows the regular procedure, as described on the Fontys website / HAS website. Application for specific units of study does not apply.

## 6. Assessment of minor and application for tests

*Table 3: Assessment details with rating scale*

| ***Test*** | ***Form shape*** | ***Individual/group*** | ***Rating scale*** |
|---|---|---|---|
| Action Plan | Reporting | Individual | pass/fail |
| Project plan | Reporting | Group | pass/fail |
| Project result | Reporting<br>Presentation | Group | 1..10 (40%) |
| Knowledge sharing Day | | Individual | pass/fail |
| Knowledge Assessment | Presentation<br>Assessment | Individual | 1..10 (30%) |
| Professional attitude | Reflection | Individual | 1..10 (30%) |

Final grade is calculated by:

Final grade = gradeProject*40% + gradeAssessment*30% + gradeProfAttitude*30%

AND 3x pass for action plan, project plan, knowledge sharing day.

## 7. Completion of the Minor

The minor has been obtained if all the tests mentioned in point 6 have been completed with a pass grade (i.e. 5.5 per test). A student will be allocated the total number of credits to be obtained as soon as he meets all the (testing) requirements. In other words: 30 EC or 0 EC will be awarded (no ECs will be awarded for each component). For internal (Venlo) students a resit at a later time is possible. For external students, a statement of completed study units is available upon request.

## 8. Examination Board

The board of examiners for this minor is the board of examiners of

- Fontys Hogeschool Techniek en Logistiek (fhtenl-excie@fontys.nl);
- HAS (examencievenlo@has.nl).

Because Fontys acts as secretary for this minor the examination board is the one of Fontys Hogeschool Techniek en Logistiek.

## 9. Validity

This information is valid for the academic year 2019-2020.

## 10. Minor entrance requirements

In order to be able to take part in the minor, the student must meet the requirements as stated in the Education and Examination Regulations (EER)[1] of his study programme or have permission from the board of examiners of his study programme.

## 11. Accessibility:

The minor is open to students with a technical[2], biological or business background.

**Students are not required to meet any other requirements for participation in and completion of the minor, other than those set out in the detailed Minor Regulations herein.**

[1] In Dutch: Onderwijs- en Examenreglement (OER)
[2] For Fontys Venlo the students of educations Software Engineering, Industrial Product Design and Engineering are allowed to enter this minor.

# Smart Innovation
# Minor regulation 2019-2020

Terug naar begin

**1. Name minor: Smart Innovation**

**2. English name: Smart Innovation**

**3. Minor content**

*Introduction*

Students will have a look at innovation and research from a technical as well as a conceptual and design perspective. They will focus on information gathering/processing and product design and learn how data can be gathered by different means, be communicated, interpreted, combined, processed and transformed into information understandable for others. Minor activities are based on carrying out research in innovative areas resulting in a prototype with added value. Usability improvement is done by analyzing user behaviour on prototyping events. The official language of this minor is English.

*Goals*

The student understands what applied research and innovation is, and participates in an applied research project. The student has basic knowledge about how to plan, organize and carry out research as well as how to apply innovative techniques. More specific, the learning goals are that the student is able:

- to carry out innovative applied research,
- to apply innovation techniques,
- to show how to design and build innovative prototypes,
- to do research through design in which the user is central,
- to work as a team member in a project group and applies different technologies and methods as mentioned above, to realize a prototype of an innovative concept.

*Summary*

The minor Smart Innovation gives students an opportunity to experience innovative research. The purpose of the minor is to gain a multidisciplinary view of innovation and how it is applied to research as well as thorough understanding and knowledge about how to carry out research. Students learn how to design and build prototypes in multidisciplinary teams by applying research methods and also carry out an individual research.

**4. Overview of the courses in the minor** *(see article 12, general section TER)*

The total work load for this minor 30 European Credits (EC), duration is 1 semester. The minor consists of the following modules:

| *Modules* | *Project* | *Research* | *Innovation* | *TOTAL* |
|---|---|---|---|---|
| Studyload in hours | 560 | 140 | 140 | 840 |

Description of the modules:

| *Modules* | *Description* | *studyload in EC* |
|---|---|---|
| Project | In the project you apply knowledge gained in the other modules. In multidisciplinary groups, you will develop an innovative application/product/service, based on applied research. The module includes coaching and may include project specific lectures (enabling skills).<br>We give much attention to user centered design. Where needed, specific related topics and techniques out of your major domain can be taught in more detail. | 560 |
| Research | Theory (problem statement, research question, information gathering, analysis, decision making, technical writing etc.) and practice (application of what is learned to the project). | 140 |
| Innovation | Theory (managing innovation) and practice (innovation/creativity techniques) is run during the first part of the minor. In the Innovation module, the student is introduced into the wide field of innovation with | 140 |

| | | |
|---|---|---|
| | all its aspects. What is innovation? Which fields of engineering are related? What are tools to innovate?<br>Guest speakers are invitet and field trips are made where applicable. | |

For each of these modules, more detailed information is available in a separate module description.
Scheduled weekly hours:

| *Course* | *Duration* | *Theory* | *Feedback* | *Workshop* | *Project work* |
|---|---|---|---|---|---|
| Project | 1 semester | 1x2 hr | 2x2 hr | | 16 hr |
| Research | 1 quartester | 1x2 hr | | 2x2hr | |
| Innovation | 1 quartester | 1x2hr | | 2x2hr | |

**5. Procedure for enrolment for the courses of the minor**
Minor enrolment follows regular procedure, as stated on the Fontys website.

**6. Tests and procedure for enrolment for the tests** *(see article 18 & 22, general section TER)*
Students don't have to enrol themselves for the tests. For Innovation the exam is scheduled at the end of the quartester. The due date for the research paper is Monday of the third week of the second quartester. Students get feedback on their work during feedback and workshop hours.

| *Modules* | *Assessment* | *individual/ group* | *Scores* |
|---|---|---|---|
| Project | • research report<br>• research paper<br>• handover document<br>• final prototype demonstration<br>• poster and video presentation<br>• project archive (e.g. software repository) | All assessment products are the result of teamwork, but when grading the products, the following aspects are assessed:<br>• Group: Content, approach and result<br>• Individual: Team skills, quality, quantity, reliability, applied research, application of innovative techniques | 1.0…10.0 |
| Research | Individual research paper and/or (video) blog etc.: research skills, writing skills and skills of presenting research activities (blog) will be assessed | Individual | 1.0…10.0 |
| Innovation | Written exam: knowledge, innovation skills, understanding will be assessed | Individual | 1.0…10.0 |

**7. Examination of the minor** *(see article 19, paragraph 3, general section TER)*
Each assessment of the minor will be rated with a mark between 1.0 and 10.0. To pass this minor the student has to satisfy following requirements: all marks >=5.5. Where marks are composed of sub marks it is described in the module descriptions.
A student will only get credits assigned as soon as he brings all above mentioned (part 4) modules to an end successfully, so either 30 ECTS or no credits at all (0 ECTS) are assigned.

**8. Examencommissie** (*article 38, general section TER)*
The examination board for this minor is represented by the examination board of Fontys Hogeschool Techniek en Logistiek Venlo (fhtenl-excie@fontys.nl).

**9. Validity period**
This information remains valid for the duration of the 2019-2020 Academic Year.

**10. Entry Level minor**
Students must have successfully completed their propaedeutic year. If the propadeutic year is not (yet) completed, students have to get permission by the examination board to enrol in the minor. Other students who can show a similar level of skills required for doing innovative research may participate depending on availability of (educational) resources.

**11. Accessability**
This minor is not accessible by students who can not show the entry level.

**12. Contact**

This minor is offered by Fontys Hogeschool Techniek en Logistiek Venlo. For further information please contact:

- Dr. Gregor Schwake: g.schwake@fontys.nl, phone: 08850-89271

**In terms of participation and completion of their minors, students will not be required to satisfy any other requirements than those as hereby determined in these minor regulations and the corresponding module descriptions.**

# Design for Engineers
## Minor regulation 2019-2020

Terug naar begin

**1. Name minor: Design for Engineers**

**2. English name: Design for Engineers**

**3. Minor content**

*Introduction*

In our everyday life we encounter a lot of products that are designed and manufactured. There's a lot that takes place before such products come into existence. The actual engineering often focusses on the last part of the development-proces. These products were all in some way designed. So design plays an important role in the creation of products. Within companies, teams often consist of designers as well as engineers to create innovative products.
Knowledge of the design process is essential for successful engineering.
The minor Design for Engineers combines theory and skills with practical work in a project.

The project is the core of this minor. Theoretic modules support the core. The minor contains 'self select modules', offered to enable students to elaborate in Engineering (e.g. Solidworks Motion,) or in Industrial Design (e.g. Web design, Digital sketching, Advanced Product Photography). Self select modules give students the opportunity to create a course which best suits his/hers interests and experience. In order to offer the students to follow the latest trends or a better fit to the core project, the organization of the minor has the right to add or replace self select modules during the academic year.
The list of self selection modules will be updated before the start of the minor and communicated to the participants.

*Goals*

Students will be able to:

- Develop or optimize a product.
- Gain a thorough helicopter view of the product's renewal- or innovation cycle
- communicate and collaborate with students from different courses and nationalities.
- communicate and collaborate with client companies in a professional manner.
- communicate (write, speak, present and listen) in English.
- develop an own expertise based on the courses they select (see self select modules).
- gather information and obtain the skills to succesfully implement in a product development project.
- Use the Product Design and Development Process, as a means to manage the development of an idea from concept through to production.
- Employ research and analysis methodologies as it pertains to the product design process, meaning, and user experience.
- Apply creative process techniques in synthesizing information, problem-solving and critical thinking.
- Demonstrate and employ hand drawing and drafting principles to convey concepts.
- Use basic fabrication methods to build prototype models.
- Demonstrate, apply, explain, and recognize basic engineering, mechanical, and technical principles.

*Summary*

The minor gives the students an opportunity to experience product development in teams. Collaboration with (foreign) students and communication with group members play an important role. Students as a group (i.e. bringing own expertise and expertise of other group members deliver the best possible solutions during product development cycle. The purpose of the minor is to gain a thorough helicopter view of the product renewal- or innovation cycle.

**4. Overview of the courses in the minor** *(see article 12, general section TER)*
The work load for this minor 30 European Credits, duration is 1 semester. The following minor parts (modules) have been defined:

| *Project module* | | *Self select modules** | *workload* | | *Self select modules** | *workload* |
|---|---|---|---|---|---|---|
| Multidisciplinary Project of a complex product | | Market research | 28 | | Human Factors | 56 |
| | | Materials & Production | 28 | | Design Competition | 56 |
| | | Sustainability | 28 | | Solid works Motion | 56 |
| | | Business Management | 28 | | Solid works Surface Modeling | 56 |
| | | Patent research | 28 | | Solid Works Topology | 56 |
| | | Ethics | 28 | | Composites | 56 |
| | | 3D printing basics | 28 | | Digital Sketch Tablet | 28 |
| | | 3D printing intermediate | 28 | | Photography Basics | 28 |
| | | | | | Photography Advanced | 28 |
| | | | | | Web design | 56 |
| | | | | | Rhinoceros 3D | 28 |
| | | | | | Keyshot | 56 |
| | | | | | Automotive Engineering | 56 |
| | | | | | | |
| Total 560 hours | | | | | select total | 840 hours |

* A student needs to select form the modules in the list which represent a minimum workload of 280 hours. This list is an example of the self select modules offered in 2018 and is subject to changes; adding or replacing modules that offer more suitable themes.

*Description of the modules*
Project module
The project element aims to provide an experience of multi-disciplinary integration within a complex design project.
In the project students will have the opportunity to:

- Gain experience of the complexities of multi and interdisciplinary working.
- Broaden their knowledge of disciplines on the periphery of their main study.
- Gain or further their experience of generating and developing conceptual ideas.
- Analyse and evaluate design concepts against established criteria.
- Work as part of an integrated team developing a product to a working prototype stage.
- Define product specifications based on user and situation analysis.
- Develop product design solutions meeting established performance criteria
- Research and evaluate a relevant study topic.

Self select modules (subject to changes; adding or replacing modules that offer more suitable themes)

| *Modules* | *Description* | *Studyload in hours* |
|---|---|---|
| Market research | Lecture on the theory of market research, how to organize, how to interpret the results, how to report etc. The students will have to do a market research in groups and in relation to the project. | 28 |
| Materials and Production | Series of (guest) lectures on materials and production techniques | 28 |
| Sustainability | Series of lectures on sustainability (methods and theories) | 28 |
| Business Management | Series of (guest) lectures on the business side of product development, organization-structures, financing etc. | 28 |
| Patent research | Series of (guest) lectures on copyright, patent right, patent search, etc. The students will have to do a patent research. | 28 |
| Ethics | Introduction module to the basics of ethics. Discussions based on ethical flows. | 28 |
| 3D printing basics | background and basic knowledge about 3D printing and additive manufacturing. About the What, Why and How. | 28 |
| 3D printing intermediate | practical module. From 3D modeled digital object to 3D print. | 28 |
| Human Factors | Practical module in which groups of students take on an ergonomic problem and apply an ergonomic research set-up. | 56 |
| Solid Works Motion | Practical module, introducing the Solid Works Motion module. The student will learn how to analyse the kinematic and dynamic behaviour of Solid Works assemblies | 56 |

| | | |
|---|---|---|
| Solid Works Surface Modeling | Practical module, introducing free form Surface modeling. The student will learn how to construct complicated free form surfaces and surface transitions in Solid Works. | 56 |
| Solid Works Topology | Practical module, introducing software that enables you to make designs inspired by nature. This approach is especially interesting in combination with 3D printing | 56 |
| Composites | Series of lectures and practical tests on the use of composite materials and engineering constructions | 56 |
| Digital Sketch Tablet | Practical module, improving the presentation skills. The student will learn how to make product renderings with a digital sketch tablet in combination with the software Painter and Photoshop | 28 |
| Photography Basic | Practical module, learning the basics of photography and the use of the photo studio. | 28 |
| Photography Advanced | Practical module, expanding the possibilities on product photography, based on the Photography Basic module. | 28 |
| Web design | Practical module, broadening your presentation skills. The student will learn how to set up a web pages, lay-out, do's and don'ts. | 56 |
| Rhinoceros 3D | Practical module, broadening your presentation skills. The student will learn to use the 3D modeling software Rhinoceros. This software is common for concept visualization where the concept needs to be detailed to a more convincing level then a (digital) sketch, but not to an engineering level as you would do in Solid Works. | 28 |
| Keyshot | Practical module in which more advanced surface modelling will be combined with professional rendering software (Keyshot). | 56 |
| Design Competition | Entering a design competition (National or international). Like a small design project, the student must study the brief, make conceptual designs and present the final design on a professional level. | 56 |
| Automotive Engineering | Series of lectures on several automotive principles such as steering geometry, suspension, drive systems etc. | 56 |

**5. Procedure for enrolment for the courses of the minor**
Minor enrolment follows regular procedure, as stated on the Fontys website.
External students can contact Remko Killaars (r.killaars@fontys.nl)

**6. Tests and procedure for enrolment for the tests** *(see article 18 & 22, general section TER)*
Students don't have to enrol themselves for the tests.

| Modules | Assessment | individual / group | Assessment scale |
|---|---|---|---|
| Project | Report + presentation + peer assessment | group | 1 .. 10 |
| Market research | Report | group | 1 .. 10 |
| Materials & Production | Presentation | in pairs | 1 .. 10 |
| Sustainability | Presentation | in pairs | 1 .. 10 |
| Business Management | Assignment | group | 1 .. 10 |
| Patent research | Assignment | individual | 1 .. 10 |
| Applied Ergonomics | Report | group | 1 .. 10 |
| Solid works Motion | Assignment including report | in pairs | 1 .. 10 |
| Solid works Surface Modelling | Assignments | individual | 1 .. 10 |
| Solid Works Topology | Assignments | individual | 1 .. 10 |
| Composites | Assignments | individual or in pairs | 1 .. 10 |
| Digital Sketch Tablet | Assignment | individual | 1 .. 10 |
| Photography Basic | Assignment | individual | 1 .. 10 |
| Photography Advanced | Assignment | individual | 1 .. 10 |
| Web design | Assignment | individual | 1 .. 10 |
| Rhinoceros 3D | Assignment | individual | 1 .. 10 |

| | | | |
|---|---|---|---|
| Advanced Modeling and Rendering | Assignment | individual | 1 .. 10 |
| Automotive Engineering | Assignment including report | in pairs | 1 .. 10 |
| Design Competition | Assignment | individual | 1 .. 10 |
| Ethics | Report | individual | 1 .. 10 |
| 3D printing basics | Assignment | individual | 1 .. 10 |
| 3D printing intermediate | Assignment | individual | 1 .. 10 |

**7. Examination of the minor** *(see article 19, paragraph 3, general section TER)*
The minor end grade is a weighted average (weights correspond to workload) of the module grades. A student passes the minor if all modules are >= 5,5 or 'pass'.
A student will only get credits assigned as soon as he brings all above mentioned (part 4) modules to an end successfully, so either 30 EC or no credits at all (0 EC's) are assigned.

**8. Examencommissie** (*article 38, general section TER)*
The examination board for this minor is represented by the examination board of Fontys Hogeschool Techniek en Logistiek Venlo (fhtenl-excie@fontys.nl).

**9. Validity period**
This information remains valid for the duration of the 2019-2020 Academic Year.

**10. Entry Level minor**
Students must have successfully completed their propaedeutic year. If the propadeutic year is not (yet) completed, students have to get permission by the examination board to enrol in the minor. Students from outside Fontys FHTenL have to explicitely ask for admission. This is given by the contact persons, mentioned in point 12. English language at IELTS level 6 is strongly recommended.

**11. Accessability**
There are no specific groups excluded from enrolment, other than mentioned in part 10.

**12. Contact**
This minor is offered by Fontys Hogeschool Techniek en Logistiek Venlo. For further information please contact Remko Killaars (r.killaars@fontys.nl)

**In terms of participation and completion of their minors, students will not be required to satisfy any other requirements than those as hereby determined in these Minor Regulations.**

# Customs Management in International Business
## Minor regulation 2019-2020

Terug naar begin

**1. Name minor: Customs Management In International Business (CUMIB)**

**2. English name: Customs Management In International Business (CUMIB)**

**3. Minor content**

Market developments

The Western European countries with large ports, such as Rotterdam, Hamburg, Bremen and Antwerp, have become the most attractive locations for importing and exporting to the EU, including customs procedures as customs clearance and inspection. To remain a Gateway to Europe, it is very important that this part of international trade is facilitated so that the regulatory burden and the (logistics) time lost in the supply chain are as short as possible. This kind of trade facilitation is becoming extremely successful in the Netherlands because it is based on the -for the European situation- unique cooperation between customs and the business community.

Although inner EU boundaries have disappeared since 1993, customs play an increasingly important role in intercontinental trade and also in inter-European trade. Having neglected the importance of knowledge related to customs and customs procedures, companies nowadays experience a lack of knowledge leading to an increase in (unnecessary) costs.

The introduction of AEO-permits also requires insight into business management organizational theory for both customs and business staff. In order to tackle these kinds of issues in academical research, our future society asks for generalists with broad customs training at both bachelor and master level

Professional Generalists

These challenges mentioned above illustrate the need for generalists, who not only are acquainted with logistics and global sourcing, but also in customs legislation and trade compliance. Therefore to put it shortly: the knowledge gained in this minor will yield a lot of opportunities on the labour market, whatever the branch or job will be.

Minor Customs Management

The minor has been based upon the three following fundamental subjects:

1) Customs procedures and regulations;
2) Global Trade;
3) Information systems.

The reason for these three elements is related to current global supply chain. Sourcing in e.g. China is of course much cheaper in production costs. So cheap, that the increased transport costs makes no difference. The question arises how to organise these incoming flows from a logistic point of view (reduce costs/ reduce troughput time/ improve reliability/ increase customer service) while at the same time remain compliant.

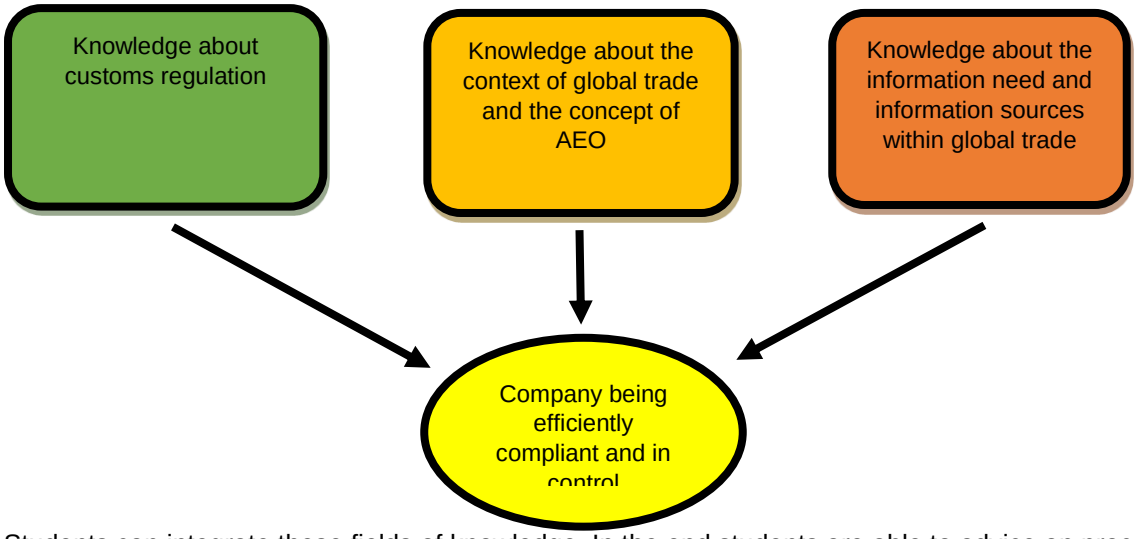
So students will be taught to think about the consequences of global sourcing, identifying the risks of global trade and take measurements to meet these risks to make sure the company is compliant.

This minor has the same structure as the master Customs and Supply Chain Compliance, offered by the Erasmus University in Rotterdam and has been developed in cooperation with the Erasmus University.

The minor has, unlike most minors, the unique combination and mix of learning and doing. Lectures will be given by experienced business people and teachers. A project will be carried out in a real company, so students can apply the theory in practice.

Goal
At the end of this minor students have broader knowledge about customs law and trade compliance and know how to apply this in practice.

In the picture below the fundamental subjects and further explanations are visible.




Students can integrate these fields of knowledge. In the end students are able to advice on process improvements, these process improvements are related to the company's internal processes which are related to the international flow of goods, taking into account customs law, all in order to to make sure that risks are better covered, or costs have been reduced or delivery reliability has improved.

Diploma addition
The student has proven to be able to analyse Trade Compliance issues in a context of global trade taken into account financial and organisational consequences for companies. In order to do that the student is familiar with customs law.

**4. Educational components**
The work load for this minor 30 European Credits, duration is one semester. The minor is divided into two periods. During the first periode lectures are scheduled, the second focesses entirely on the execution of an individual project.

Below a brief planning is added, indicted are the hours/ week in which lecture is planned.

| | week | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| introduction | 8 | | | | | | | | 8 | | | | | | | | | | | |
| CUS1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | E | | | | | | | | | | | |
| CUS2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | E | | | | | | | | | | | |
| Trade compliance | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 16 | | | | E | | | | | | | | |
| introduction into project | 2 | 2 | | 2 | | 2 | 2 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| project | | | | | | | | | | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | | 2 |
| # lecture/ week | 25 | 17 | 15 | 17 | 15 | 17 | 17 | 16 | 8 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | | |

Below all learning arrangements are briefly explained.

| *Learning arrangments (LA)* | *Description* | *Studyload in hours* |
|---|---|---|
| Introduction | Understanding of the working field and excursions | |
| Customs1 (CUS1) | Introduction into customs, including the history of customs and the appointed task in relation to world organisation like WTO, WCO and EU. Furthermore the introduction into classification into the Combined Nomenclature, establishment of origin and customs value is explained. The working of TARIC. Last the concept of dual-use goods, export controls and agricultural levies is explained. | 140 |

| | | |
|---|---|---|
| Customs 2 (CUS2) | Processes related to the entry into the EU and the customs procedures are explained. Furthermore the concept of anti-dumping and counterfeit is discussed | 140 |
| Trade Compliance | Context of world trade<br>Continuous growth of world trade stimulated by trade facilitation and free trade agreements, extended gateways<br>Concept of AEO<br>Idea behind AEO, effect of self assessment, risk analysis and control measures<br>Information need, related to global trade<br>Information need related to customs declaration and the source of this information. IT solutions to facilitate the distribution of information (data pipeline, WCO datamodel, DMS)<br>Financial implications of global trade<br>VAT on importation, including the Dutch fiscal representation, concept of excise and EMCS, financial security related to declarations, customs debt.<br>Playing management game | 140 |
| Project | There are two possibilities to carry out the project. In consultation with the teacher, the student may choose what suits him best. | 420 |
| | The first option is that the project wil be carried out in a real company during five days/ week by an individual student.<br><br>The goal is to advice the company:<br>• On process improvements related to the international flow of goods and customs procedures;<br>• To make sure that processes are compliant to customs' law, compliance risks or costs have been reduced, or delivery reliability has improved.<br><br>The project may be carried out by executing a project submitted by the company or by executing a predescribed scan at the company. | |
| | The second option is to carry out a desk research covering a trade compliance topic. To do this the student must carry out literature research and interview at least five compliance managers and /or conduct a survey. The topic and way to proceed must be determined in consultation with the teacher. | |

**5. Enrolment in the education components**
Students do not need to enrole for individual educational components in the minor.

**6. Overview of tests and registration for tests**
All educational components will be conducted with an individual written examination. The examinations will be scheduled during the examination period. Time of the examination will be presented in the timesheet. In the table below all examinations are presented.

| LA | Assessment | individual / group | Assessment scale |
|---|---|---|---|
| CUS1 | Written examination | Individual | 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| CUS2 | Written examination | Individual | 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| Trade Compliance | Written examination | Individual | 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| Project | Report, presentation and discussion | individual | 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |

The results of the project must be described in a report and its findings must be presented for the teachers and the company (if applicable). The findings will be discussed then. After that, the final project note will be given.

All examinations are scheduled twice. Hence all students have two possibilities to pass the examination. An examination is considered to be passed when the final score is at least a rounded 6.

The project is also passed when the final note is at least a rounded 6. If scored lower than a 6, it can be repaired (however after having it repaired, the final note can never be higher than a 6).

The final note for the minor will be calculated by the weighted average of all examinations, based upon the study load of each educational component.

**7. Examination of the minor** *(see article 19, paragraph 3, general section TER)*
For passing the minor, students must pass all exams and the project.

**8. Examination board** (*article 38, general section TER)*
The examination board for this minor is represented by the examination board of Fontys Hogeschool Techniek en Logistiek Venlo (fhtenl-excie@fontys.nl).

**9. Validity period**
This information remains valid for the duration of the 2019-2020 Academic Year.

**10. Entry requirements minor**
Students must have successfully completed their propaedeutic year from one of the studies that are suitable to follow the minor (see table below). If the propadeutic year is not (yet) completed, students have to get permission by the examination board to enrol in the minor.

Furthermore there are studies that will suit perfectly with this minor, based on content. These are (international) business related studies. Below you will find as an example a listing of possible Fontys studies which would match[3]. Comparable studies from other universities would match as well..

| University: | Institute: | Education | Place: |
|---|---|---|---|
| Fontys | FHTL | Logistic Management | Venlo |
| | | Logistics Engineering | Venlo |
| | | Business Informatics | Venlo |
| | FIBS | International Business and Management Studies | Venlo |
| | | Commerciële economie | Venlo |
| | | Technische Bedrijfskunde | Eindhoven |
| | Management Economie en Recht | Bedrijfskunde | Eindhoven |
| | | Finance, Tax and Advice | Eindhoven |
| | Marketing en Management | Commerciele Economie Leisure Management | Eindhoven |
| | | Ondernemerschap en Retail Management | Eindhoven |
| | | Commerciele Economie | Eindhoven |
| | | International Business | Eindhoven |
| | Financieel Management | Accountancy | Eindhoven |
| | | Finance & Control | Eindhoven |
| Fontys | Academy for creative industries | Commerciele Economie: Digital Business Concepts | Tilburg |
| | | Communicatie: International Event, Music and Entertainment studies | Tilburg |
| | | Commerciele: International Event, Music and Entertainment studies | Tilburg |
| | | International Business | Tilburg |
| | | HBO-Rechten | Tilburg |
| Comparable institutes in | | | |

[3] This list is not complete.

| | | | |
|---|---|---|---|
| Holland and Germany | | | |

*Students coming from another study than mentioned above must ask permission at their examination board before participating. It might be difficult for them to pass this minor, for basic understanding of companies, process optimization and efficiency are required. Furthermore good knowledge of English Language is important.

### 11. Accessability

Not accessible for studies with no related business-related background (see also 10. Entry level background).

### 12. Contact

This minor is offered by Fontys Hogeschool Techniek en Logistiek Venlo.

| | | |
|---|---|---|
| 1 | Name of minor | Customs Management in International Business |
| 2 | Organising institute | Fontys Hogeschool Techniek en Logistiek |
| 3 | Managing Director | Mr. J.A.H. Aarts |
| 4 | Minor Coordinator | Ms. L. Vocks<br>E: l.vocks@fontys.nl<br>T: 0031 (0)8850 79182 |
| 5 | Language | English |
| 6 | Location | Fontys Hogeschool Techniek en Logistiek<br>Tegelseweg 255<br>Venlo |
| 7 | Period | September 2019 – January 2020 (requirement: min. 10 registrations) |

**In terms of participation and completion of their minors, students will not be required to satisfy any other requirements than those as hereby determined in these Minor Regulations.**

# Composite Minor
## Minor regulation 2019-2020

Terug naar begin

**1. Name minor: Compositie minor**

**2. English name: Composite minor**

**3. Minor content**
*Introduction*
This minor is for students who did not succeed in finishing a minor outside FHTenL. The content of this minor is not prescribed.
Taking into account modules passed in the host institution students can complete a minor using modules/units of study from within FHTenL. This requires the formulation of a (new) learning agreement and on successful completion of the agreed modules students will be awarded the credits gained in the host institution in addition to those gained in the composite minor.

*Goals*

- To give students who did not succeed in finishing a minor outside FHTenL succesfully the opportunity to keep the acquired results and complete a minor.
- To standardise the way in which missing credits are repaired
- To garantuee quality standards for tests of missing credits

*Summary*
The contents of the composite minor can be chosen by the student from all post-propedeutic FHTenL modules. Prerequisite for access to this minor is that a student has gained results in another minor but was not able to complete the originally chosen minor.

**4. Overview of the courses in the minor** *(see article 12, general section TER)*
The work load for this minor is variable but always less than 30 EC's (European Credits). Modules can be chosen within FHTenL but have to be post-propaedeutic and cannot have any overlap with the major course of the student.

*Description of the units of study*
The modules that a students will participate in have to be available within FHTenL. The modules can be chosen by the student but no overlap with the major or previous minor is allowed. The level of the modules has to be post-propedeutic.

**5. Procedure for enrolment for the courses of the minor**
This minor is only accessible for students who have already participated and passed modules in a minor but where not able to gain all 30 credits (30 ECs) needed to finish that minor. Students need to formulate a learning agreement (at fhtenl-excie@fontys.nl) for the complete minor including the already passed modules (and their weight in EC's) in the previous minor, based on advice of the curriculum owner of their major course. The learning agreement (bearing the signature of the curriculum owner) has to be submitted to the FHTenL Examination Board for approval. The learning agreement form can be found on the portal of the examination board.
Students participating in this minor have to be aware that by bringing previously passed modules into this minor they change from the original minor to this minor. On their graduation certificate only the name plus summary of this minor will be stated. E.g. the certificate will not show the title 'minor abroad' but will say 'composite minor'.

**6. Tests and procedure for enrolment for the tests** *(see article 18 & 22, general section TER)*
As stated in the TER of the course.

**7. Examination of the minor** *(see article 19, paragraph 3, general section TER)*
Examination of the modules is according to the TER of the course.

**8. Examencommissie** (*article 38, general section TER)*
The examination board for this minor is represented by the examination board of Fontys Hogeschool Techniek en Logistiek Venlo (fhtenl-excie@fontys.nl).

**9. Validity period**
This information remains valid for the duration of the 2019-2020 Academic Year.

**10. Entry Level minor**
n.a. see 11. Accessability

**11. Accessability**
This minor is only open to students from FHTenL. Students must have passed modules in a previous minor outside Fontys.

**12. Contact**
This minor is offered by Fontys Hogeschool Techniek en Logistiek Venlo. For further information please contact the curriculum owner of your major course.

**In terms of participation and completion of their minors, students will not be required to satisfy any other requirements than those as hereby determined in these Minor Regulations.**