

Course size (nominal values; actual values may depend on programme)  
 Credits 3.0 Study time 90 h Contact hrs 36.0 h

Course offerings and teaching methods in academic year 2018-2019

|                |         |                   |         |
|----------------|---------|-------------------|---------|
| A (semester 2) | English | microteaching     | 36.25 h |
|                |         | fieldwork         | 23.75 h |
|                |         | guided self-study | 6.25 h  |

Lecturers in academic year 2018-2019

|                 |      |                    |
|-----------------|------|--------------------|
| Gielen, Frank   | TW05 | lecturer-in-charge |
| Haerick, Wouter | TW05 | co-lecturer        |

Offered in the following programmes in 2018-2019

|  | crdts | offering |
|--|-------|----------|
| <a href="#">Bridging Programme Master of Science in Fire Safety Engineering</a>  | 3     | A        |
| <a href="#">Master of Science in Engineering: Architecture (main subject Architectural Design and Construction Techniques)</a> | 3     | A        |
| <a href="#">Master of Science in Electrical Engineering Technology (main subject Automation)</a>                               | 3     | A        |
| <a href="#">Master of Science in Communication Science (main subject Communication Management)</a>                             | 3     | A        |
| <a href="#">Master of Science in Electrical Engineering (main subject Communication and Information Technology )</a>           | 3     | A        |
| <a href="#">Master of Science in Electromechanical Engineering (main subject Control Engineering and Automation)</a>           | 3     | A        |
| <a href="#">Master of Science in Electrical Engineering Technology (main subject Electrical Engineering)</a>                   | 3     | A        |
| <a href="#">Master of Science in Electromechanical Engineering (main subject Electrical Power Engineering)</a>                 | 3     | A        |
| <a href="#">Master of Science in Electrical Engineering (main subject Electronic Circuits and Systems)</a>                     | 3     | A        |
| <a href="#">Master of Science in Communication Science (main subject Film and Television Studies)</a>                          | 3     | A        |
| <a href="#">Master of Science in Communication Science (main subject Journalism)</a>   | 3     | A        |
| <a href="#">Master of Science in Electromechanical Engineering (main subject Maritime Engineering)</a>                         | 3     | A        |
| <a href="#">Master of Science in Electromechanical Engineering (main subject Mechanical Construction)</a>                      | 3     | A        |
| <a href="#">Master of Science in Electromechanical Engineering (main subject Mechanical Energy Engineering)</a>                | 3     | A        |
| <a href="#">Master of Science in Communication Science (main subject New Media and Society)</a>                                | 3     | A        |
| <a href="#">Master of Science in Engineering: Architecture (main subject Urban Design and Architecture)</a>                    | 3     | A        |
| <a href="#">Master of Science in Civil Engineering Technology</a>  | 3     | A        |
| <a href="#">Master of Science in Electromechanical Engineering Technology</a>  | 3     | A        |
| <a href="#">Master of Science in Civil Engineering</a>   | 3     | A        |
| <a href="#">Master of Science in Chemical Engineering</a>  | 3     | A        |
| <a href="#">Master of Science in Civil Engineering</a>   | 3     | A        |
| <a href="#">Master of Science in Computer Science Engineering</a>  | 3     | A        |
| <a href="#">Master of Science in Computer Science Engineering</a>  | 3     | A        |
| <a href="#">Master of Science in Fire Safety Engineering</a>   | 3     | A        |
| <a href="#">Master of Science in Sustainable Materials Engineering</a>   | 3     | A        |
| <a href="#">Master of Science in Engineering Physics</a>   | 3     | A        |

|  |   |   |
|--|---|---|
| Master of Science in Chemical Engineering  | 3 | A |
| Master of Science in Engineering Physics   | 3 | A |
| Master of Science in Bioscience Engineering: Chemistry and Bioprocess Technology | 3 | A |
| Master of Science in Bioscience Engineering: Food Science and Nutrition          | 3 | A |
| Master of Science in Bioscience Engineering: Environmental Technology            | 3 | A |
| Master of Laws in International Business Law                                     | 3 | A |
| Master of Laws in International and European Law                                 | 3 | A |
| Exchange Programme Architecture  | 3 | A |
| Exchange Programme in Political and Social Sciences                              | 3 | A |
| Postgraduate programme in Innovation and Entrepreneurship in Engineering         | 3 | A |

#### Teaching languages

English

#### Keywords

Lean startup, entrepreneurship, business model canvas, customer validation, customer discovery, minimum viable product, product-market fit

#### Position of the course

This course is modelled after the famous 'Lean Launchpad' course, taught at Stanford university by Steve Blank, one of the creators the lean startup methodology. 'Lean Launchpad' focusses on early validation of the business model and the assumptions made in the business plan. After 12 weeks, your business model is more or less validated and you should have a better idea whether to start your business or not.

The course only has a small theory component and assumes that students are familiar with the basic elements of a business plan. The focus is on learning by doing and experience based learning. We expect students to go out and talk to potential partners, channels or customers and bring back their experiences to class to reflect on them.

This course is ideal for students with a business idea who want to validate whether it could be marketed, or students who don't have an idea but are eager to go through this process when working on someone else's idea. It is open for students of all academic backgrounds.

#### Contents

Lectures and on-line sessions:

- 1 Business models, business model canvas
- 2 Customer development
- 3 Customer discovery
- 4 Value proposition
- 5 Customer segments
- 6 Channels
- 7 Customer acquisition and activation
- 8 Customer relationships (get / keep / grow)
- 9 Revenue model
- 10 Partners
- 11 Resources and costs

#### Initial competences

- Knowledge of the theory of Business Model Canvas (from another course, workshop or self-study).
- You need to have a business idea that you would like to test in the market and you are willing to allow others to help you in this process. OR you don't have a business idea but are eager to help someone else in testing his or her idea in the market.
- You need to have an initial business model canvas for your idea.

#### Final competences

- 1 Mastering the process of customer discovery and validation.

- 2 Understanding why early market feedback is important.
- 3 Thorough knowledge about and experience with using the business model canvas.
- 4 Ability to criticize business models and minimum viable products.
- 5 Thorough knowledge of and experience in the lean startup methodology.
- 6 Understanding what a minimal viable product is and what it is used for.

#### Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

#### Conditions for exam contract

This course unit cannot be taken via an exam contract

#### Teaching methods

Guided self-study, microteaching, fieldwork

#### Extra information on the teaching methods

**Project:** Students will work in small teams (2 or 3 people) on a specific business concept of one of these students, for which they will validate the business model and the customers.

**Guided self-study:** The theoretical contents of the course is created by Steve Blank and can be studied online on Udacity, free of charge. There will be no additional theoretical lectures in this course.

**Microteaching:** Each week, all students will gather and present their results and findings to each other. They will comment on each other's work, ideas and progress. All students should participate in these sessions.

**Fieldwork:** All teams are expected to interview about 10 people each week in person or via a video calling system. All students should actively participate in this process.

#### Learning materials and price

- Online course on Udacity (free of charge, in English)
- Launchpad Central: <https://www.launchpadcentral.com/>
- Costs for fieldwork (phone calls, transportation costs)

#### References

- Business Model Generation (Alexander Osterwalder & Yves Pigneur, 2010, in English or Dutch): 45,00 €
- The startup owner's manual (Steve Blank and Bob Dorf): 33,00 €

#### Course content-related study coaching

Minerva, e-mail, Launchpad Central, e-mail, office hours, appointment

#### Evaluation methods

end-of-term evaluation and continuous assessment

#### Examination methods in case of periodic evaluation during the first examination period

Oral examination, report

#### Examination methods in case of periodic evaluation during the second examination period

Oral examination, report

#### Examination methods in case of permanent evaluation

Oral examination, participation, peer assessment, report

#### Possibilities of retake in case of permanent evaluation

not applicable

#### Extra information on the examination methods

The oral examinations are progress presentations (non-periodic evaluation) and a final presentation (periodic evaluation). Participation (presence, preparation, activity, motivation) will be scored.

#### Calculation of the examination mark

- 25% periodic evaluation
  - 20% weekly progress updates
  - 40% out of the building discovery progress
  - 15% individual participation
- Students should be present at ALL sessions.