

Minor Entrepreneurship

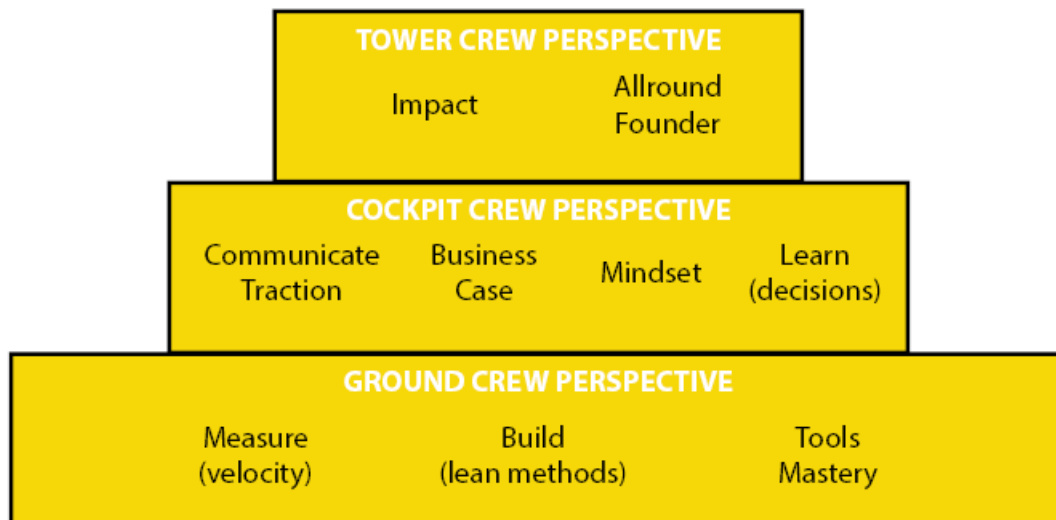
Overview

Maybe you are participating in this minor because you are curious and want to discover what entrepreneurship entails, or because you plan to start a business and want to learn how to approach this as a professional, or maybe you have already started and want to further develop your company so that it can grow.

In this minor, you will follow a proven methodology to move from 0 to 1, which is called Validated Learning. You will set up experiments to develop your business idea as quickly as possible. You want to successfully enter the market, and you will do this at the lowest possible costs and risks by trying to learn as much as possible. We call it fail fast, fail forward. You will, among other things, engage with your target audience and experts in the market, brainstorm, prototype, and gather feedback to validate your business idea.

Perspectives

The minor consists of 30 credits and is structured in 3 layers: the so-called Ground Crew Perspective, Cockpit Crew Perspective, and Tower Crew Perspective. These 3 layers consist of 9 components. Each component is linked to a learning outcome.



Ground crew perspective

As a (starting) entrepreneur, you master the components of validated learning, the ground crew perspective. You are proficient in tools such as the business model canvas, value proposition canvas, and test & learn cards (tools mastery).

You are capable of determining what the most suitable experiment is to reliably validate a business assumption. You do not waste energy on things that do not create value for the customer (lean methods). The lean method consists of three steps: build, measure & learn. You set up an experiment, go to the market, measure and learn from the experiment. You design your experiments in such a way that you make progress with each experiment and validate

assumptions in your business model, gathering sufficient customer data but not more or less (velocity). You understand the difference between running fast and actually making progress. Lean Methods and Velocity are closely related to each other, as well as to Decision Making (see next level).

Cockpit crew perspective

A good (starting) entrepreneur is also a "pilot in the plane" from the perspective of the cockpit crew. You make effective, evidence-based decisions about your business model, you know how to communicate progress to relevant stakeholders, and you develop a business case based on market potential and direct competition, in which you can substantiate the market size and the viability of your business model. You validate that you can build a profitable business based on costs and revenues.

As a (starting) entrepreneur, you have an entrepreneurial attitude (mindset). You do not wait for things to come to you; you persevere despite setbacks, are curious (be curious), try things out (try stuff), and view problems from different perspectives (reframe problems). You actively ask for help (ask for help), collaborate with others to achieve your goals, and are aware that entrepreneurship is a (continuous) process (know it's a process).

Tower crew perspective

A strategic entrepreneur has a tower crew perspective. You oversee your business and the market in which you operate. As an entrepreneur, you primarily create value for your customer. What sets you apart as an entrepreneur is your ability to create value on multiple levels: for the customer, for yourself, for partners, and for society. By actively considering stakeholders and sustainability ambitions, you create multiple value and build a business that matters – and generates financial value. In addition to economic value, you also create social and/or ecological value. You make decisions about your business idea and your business model from this broader perspective. For example, you can develop a product that looks good and is made from recycled materials.

As an entrepreneur, you don't need to be an expert in every aspect. However, you should become proficient in those areas that are relevant to your business (all-round founder). During the minor, you will work on strengthening the skills that are essential for advancing your business. These can be technical, business-related, or interpersonal skills. For example, consider deepening your knowledge in web development, programming, but also branding, online communication, storytelling, or getting your planning in order.

Class Culture

Everything emanates from your attitude; your mindset. If you believe you can't, then you can't because you won't try. If you believe that something won't work, then it won't because you won't try. Your mindset determines what you will try, determines what you can do with knowledge, and will determine your practice and growing expertise.

Growth mindset

The growth mindset sees problems as interesting challenges and embraces them as opportunities to learn. The growth mindset assumes that new skills and abilities can be learnt through lots of practice, hard work, good strategies, and input from others. The growth mindset thinks, "Try it. Making mistakes is part of learning. Nothing new ever got done by sticking with what I can already do." The growth mindset embraces challenges, perseveres in the face of

setbacks, sees effort as a path to mastery, learns from criticism, and finds lessons and inspiration in the success of others.

In contrast a fixed mindset avoids challenges, often out of fear of failing, gives up too quickly when encountering setbacks, sees effort as fruitless, ignores useful critical feedback experiencing it as negative, personal criticism rather than feedback on work, and feels threatened or discouraged by the success of others. A fixed mindset is deterministic, assuming that qualities like intelligence and talents are fixed traits that we are born with.

Our attitudes with regards to mathematics and art can illustrate this point quickly. You frequently hear people say that to do math you just have to have a "head for numbers", or that artists are "just naturally gifted". These everyday comments betray an attitude that the ability to draw or the ability to solve complex equations are innate traits, somehow the result of a genetic lottery, and not the result of long hours of practice and effort. Such attitudes refuse to recognise the hard work and dedication it took for someone to be a great mathematician or a great painter.

Most of us will have dedicated more time to mastering one skill in our formative years than the other. Mastery of materials, not genes, gives rise to ability, while embracing the challenge wholeheartedly separates mere mastery from genius "talent". However, you should guard against a false growth mindset - an assumption that anything we do will turn out golden, that it should come easy, and that we should receive nothing but praise. This fixed mindset masquerades as growth by insulating the individual from the realities of hard work and effort in a cocoon of entitlement.

Beginner mindset

Shoshin is a Japanese word meaning 'beginner's mind'. It refers to having an attitude of openness and lack of preconceptions when studying a subject, even when studying at an advanced level, just as a beginner would. So how can you develop a beginner's mind, a mind open to possibilities? The beginner's mindset as an inclination to periodically question and reassess deeply held theories, archetypes, and conventions. Try these three, easy practices;

- Forget what you think you know about the topic. Say, "I don't know" to counter the "I know" expert mindset
- Focus on questions, not answers.
- Ask deliberately naive, "what if?" questions.

Values to live by

- Speak up. No one can read your mind.
- Listen. We have two ears and one mouth.
- Own it. Commit and stand for something.
- Prove it. Opinions are for a**holes.
- Try it. Making mistakes is part of trying new things.
- Be open to possibilities.
- The only good answer is the one you can defend with data.

Learning goals

Entrepreneurship is the process of identifying, developing, and executing opportunities with the aim of creating added value, making a profit, or starting a new business. It involves taking risks, creativity, innovation, and the ability to plan and manage projects. To the Ground Crew Perspective, Cockpit Crew Perspective, and Tower Crew Perspective, there are 9 learning lines associated with learning outcomes.

Learning Goal	Short Description
Tools Mastery	Uses business tools and methodologies correctly to conduct analyses, test assumptions, and provide justifications for the various versions of the Business Model Canvas (BMC).
Build (lean methods)	Carries out experiments carefully and consciously chooses the most suitable approach to reliably validate business assumptions.
Measure (velocity)	Progress! Investigating/testing with the sample size within the used methods is sufficient in relation to TAM, SAM, and SOM to provide reliable insights (and makes a good distinction between being busy and doing things that help you move forward).
Learn (decision making)	Clearly shows which actions and consequences arise from obtained customer insights for the business model.
Communicate Traction	Communicates in a clear, coherent, concise, and complete manner what has been done and how this leads to a reliable validation (or invalidation) of business assumptions.
Business Case	Make a well-founded estimate of your market potential and calculate your business case based on assumptions and/or validated assumptions.
Mindset	Develops in the following mindsets: Try Stuff, Be Curious, Reframe problems, Know it's a process, Ask for Help.
Allround Founder	Develops 'hard' and 'soft' skills that are relevant to take the company to a higher level.
Impact	Demonstrates a conscious consideration of how the company can have a positive impact on people, the environment, and profits.

Table 1: Learning goals.

Level

Every student comes with a different set of knowledge and skills depending on their major. The knowledge and skills needed to start a business can vary significantly from that. It is not expected that you already have knowledge and experience in business administration or human-centered design.

The minor is aimed at 3rd and 4th-year bachelor students. A certain level of responsibility for one's own success, proactivity, and independence is expected from them.

Participation & Contact

Participation in the minor

A prerequisite for participation is that you are registered in Osiris.

Learning circle meetings with coach

Each participant is placed in a learning team. Every week (see schedule), the learning team meets with the coach to discuss progress and develop short cyclical plans. The meeting is scheduled for Tuesdays and attendance (in person) is mandatory. A meeting with the coach lasts a maximum of 3 hours.

If you are unable to attend a learning team session due to health reasons or another legitimate reason, you must inform the mentor by email 24 hours before the meeting is scheduled.

Learning circle meetings without coach

The learning team also schedules its own time to come together to give each other feedback and refine plans and execution. Working alone can be very liberating because you can make all the decisions yourself, but it can also create uncertainty since you have no one to truly bounce decisions off of. The learning team provides you with a direct network of people in a similar situation to brainstorm with, and who may be able to help you with contacts and knowledge.

Guest Speaker Event Thursday

At the start of the second half of the minor, a 1-day conference with guest speakers is organised. Attendance is required.

Thursday "minor doctor" walk-in

It may be that between learning circle sessions you feel a need for further sparring with a lecturer-coach. On Thursday's there is an opportunity to schedule a one-on-one consultation with a "minor doctor" for discussing specific questions/dilemmas in more depth. Consultations are on request, and should be requested minimally 24 hours in advance.

Assessment

Each student has a dashboard that consists of the 9 components mentioned in the learning outcomes. The effort and learning attitude of the student, combined with the executed experiments, provide input for the dashboard. Your performance will be monitored and assessed based on:

- Learning team coach meetings.
- Sprint review every other week.
- All-round founder workshop.
- Final business pitch.

The formative assessment moments during sprint reviews are not weighted and cannot be compensated with each other. Not attending a learning team sprint review results in a failing grade for that sprint. Failing three times on a sprint means it is not possible to successfully complete the program on the first attempt. The entire process determines the final grant of 30 ECTS linked to this minor.

When the effort and/or learning attitude of the student is concerning or may lead to a failing grade, the coach will discuss this with the student in a timely manner.

Sprint reviews

At each sprint review, you receive feedback based on the components in the dashboard, and you are informed whether your review met the criteria according to the expert opinion of the coach(es). If you do not participate in a review, you cannot retake it or compensate for it with additional activities. The dashboard will be explained during the learning team meetings.

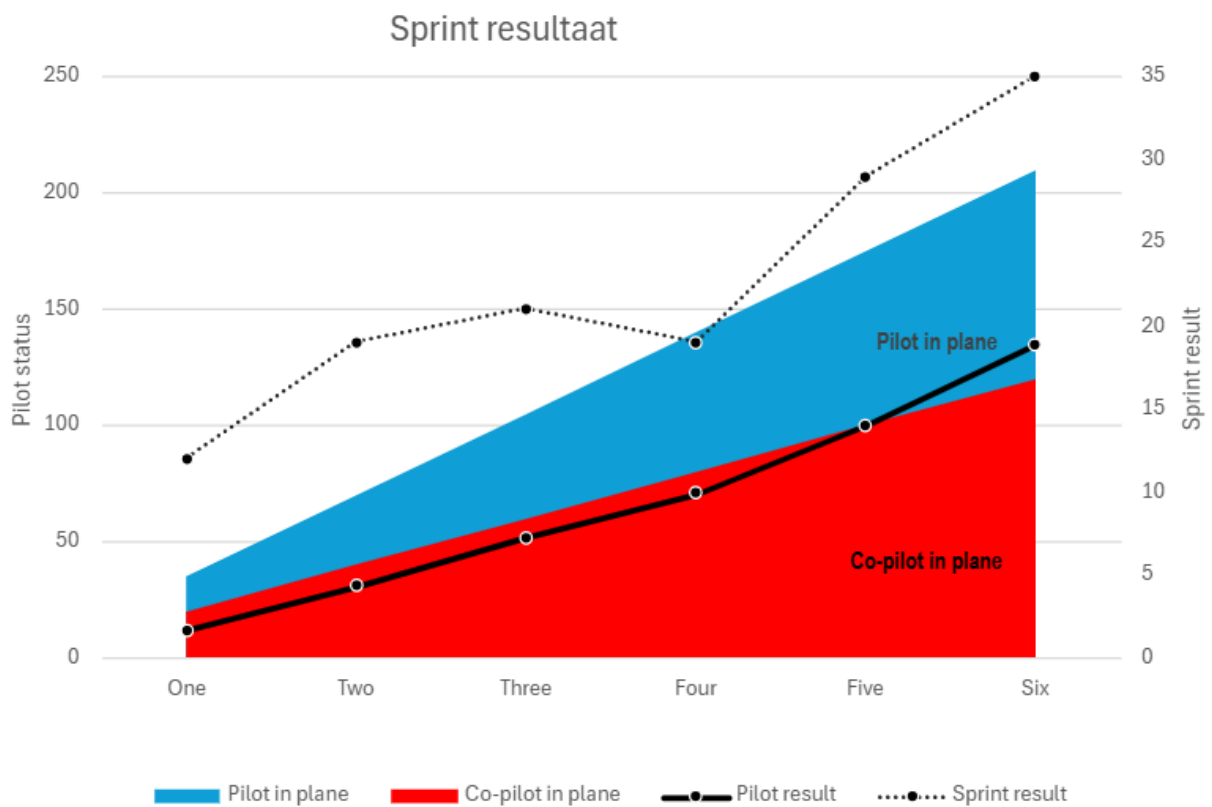
Formative assessment dashboard

Below you see a completed example of a dashboard at the end of the minor. Learning lines presented during a sprint review are assessed with a score from 0 to 5 (see explanation of learning lines). This imaginary example student-entrepreneur successfully completed the minor with a score of 6.4. The sprint results (one to six) indicate that performance on the learning lines continuously improved throughout the minor.

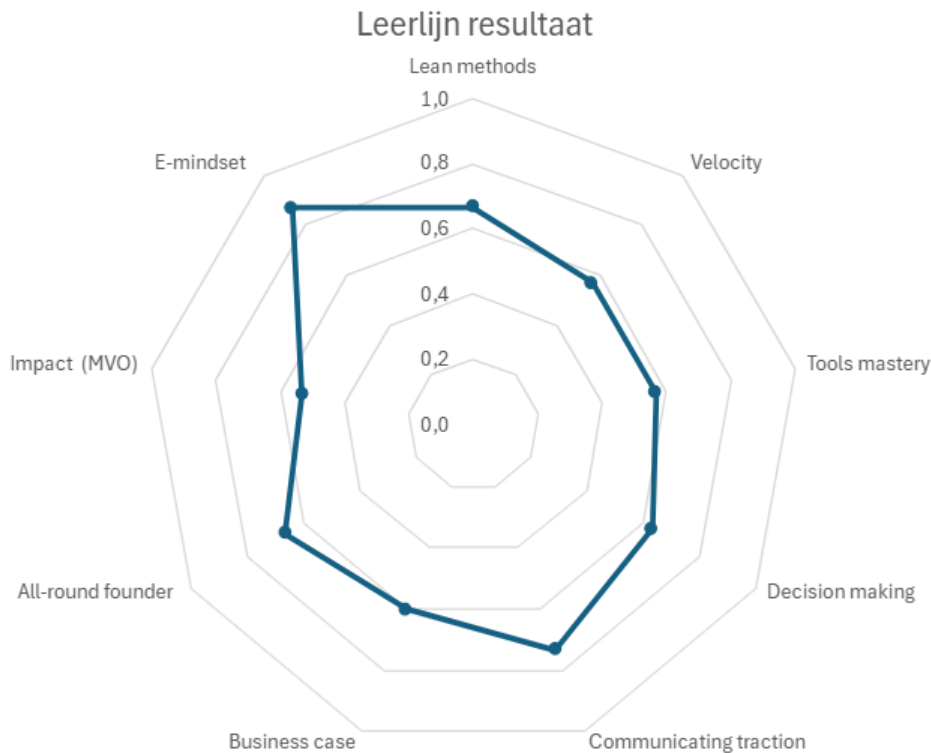
Sprint Review #	Leerlijnen										NOTITIES			
	Build (Lean)	Measure (Velocity)	Tools mastery	Learn (Decision making)	Communicating traction	Business case	Allround founder	Impact (MVO)	E-mindset	Sprint resultaat	Pilot in plane	Sprint 'pilot' status	Co-pilot in plane	
One										0	25	0	15	
Two										0	43	0	25	
Three										0	60	0	34	
Four										0	78	0	44	
Five										0	95	0	53	
Six										0	113	0	63	
ARF WS										0	130	0	72	
Pitch										0	148	0	82	
Sum	0	0	0	0	0	0	0	0	0	0,0	10,0	0,0	5,5	
Rate	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0					

Table 2: Example of student dashboard.

The result of each sprint is then displayed as follows. When you are in the red zone after a sprint review, it is a cause for concern. It may mean that if you continue like this, you will not complete the minor with a passing grade. When you are in the blue zone after a sprint review, it is a good sign. Maintain that level. The thick black line represents the cumulative result of the student-entrepreneur based on shown learning paths. The vertical axis on the left side depicts the grades. The dotted line, with an axis on the right side, represents the performance of each sprint.



Graph 1: Example result at sprint review level shown with a line graph where the right vertical axis represents the result of each sprint, and the left vertical axis shows the cumulative status of the starter after each sprint review. When the thick black line is below the red zone, it is a sign of underperformance.



Graph 2: Example result on learning lines.

Uploading Materials to Gradeworks for Summative Assessment

For assessment to be finalised you must upload **all** your sprint reviews **and** allround founder workshop materials as a single document in Gradeworks. Students who fail to submit all their work will receive an "NA" in Osiris.

Re-sitting the assessment

If you do not pass the minor directly, you are allowed to resit in the next assessment moment in this study year. Based on your published result, you can discuss with a teacher-coach what you can best do to still demonstrate that you have mastered the learning objectives.

Literature

Disciplined Startup Founder, de Bruijn, R., 2023, Path Institute.

Designing your Life – How to build a well-lived, joyful life, Burnett, B., and Evans, D., 2016, Knopf.

Recommended literature

Business Model Generation, Osterwalder, A. and Y. Pigneur, 2010, Wiley.

Scaling Up, Harnish, V., 2014, Gazelles, Inc.

Scaling Lean, Maurya, A., 2015, Portfolio / Penguin.