



Supporting the entrepreneurial potential of higher education

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Case Study No. 17:

**Erasmus University Rotterdam,
Netherlands:**

**Building the Erasmus Centre for
Entrepreneurship and advancing
corporate entrepreneurship**

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About the sepHE Study

The study "Supporting the entrepreneurial potential of higher education" was based on a contract between the European Commission, Directorate General Education and Culture (DG EAC), and empirica Gesellschaft für Kommunikations- und Technologieforschung mbH (co-ordinator – Bonn, Germany) as well as the University of Wuppertal, UNESCO Chair of Entrepreneurship and Intercultural Management (Wuppertal, Germany).

The study's main purpose was collecting 20 case studies about insightful practice in entrepreneurship education at European universities. This is one of them. The findings from a cross-case analysis are included in the Final Report which is available at the study's homepage and at DG EAC's website.





17 Erasmus University Rotterdam, Netherlands: building the Erasmus Centre for Entrepreneurship and advancing corporate entrepreneurship

Overview of contents

| | | |
|--------|--|-------------------------------------|
| 17.1 | The university's entrepreneurship education profile | 4 |
| 17.1.1 | <i>The university's overall approach to entrepreneurship education</i> | 4 |
| 17.1.2 | <i>Leadership and governance</i> | 4 |
| 17.1.3 | <i>Resources: people and financial capacity</i> | 6 |
| 17.2 | Entrepreneurship in curricula and teaching | 6 |
| 17.2.1 | <i>Overview about curricular offers</i> | 6 |
| 17.2.2 | <i>Target groups</i> | 9 |
| 17.2.3 | <i>Designing lectures and courses – basic curricular decisions</i> | 10 |
| 17.2.4 | <i>Setting of entrepreneurship teaching</i> | 12 |
| 17.2.5 | <i>Instructors: teachers and mentors</i> | 13 |
| 17.3 | Extra-curricular activities related to entrepreneurship education | 14 |
| 17.3.1 | <i>Overview about extra-curricular entrepreneurship activities</i> | 14 |
| 17.3.2 | <i>Target groups of extra-curricular activities</i> | 16 |
| 17.3.3 | <i>Designing extra-curricular activities</i> | 16 |
| 17.3.4 | <i>Setting of extra-curricular activities</i> | 18 |
| 17.3.5 | <i>Persons involved in extra-curricular activities</i> | 19 |
| 17.3.6 | <i>Management of extra-curricular activities</i> | Error! Bookmark not defined. |
| 17.4 | Institutional aspects of entrepreneurship education | 19 |
| 17.4.1 | <i>Organisational set-up and change</i> | 19 |
| 17.4.2 | <i>Mindsets and attitudes</i> | 22 |
| 17.5 | Impact and lessons learned | 23 |
| 17.5.1 | <i>Evaluating impacts of the entrepreneurship education approach</i> | 23 |
| 17.5.2 | <i>Lessons learned</i> | 23 |



Abstract



Erasmus University Rotterdam has a long track record in entrepreneurship teaching and research, notably both in entrepreneurial management and also in the economics of entrepreneurship through its Rotterdam School of Management and Erasmus School of Economics. The central hub for extra-curricular entrepreneurship education, training, and coaching offers is the Erasmus Centre for Entrepreneurship within the university. In 2013 Erasmus University expanded its already well-established entrepreneurship education profile by adding corporate entrepreneurship to its agenda of master degree programmes in entrepreneurship and targeting small business owners and corporate intrapreneurs also in its entrepreneurship training offers within the entrepreneurship centre. This entrepreneurship portfolio and the organisation of corresponding education activities in cooperation with a community of entrepreneurs contribute to the valorisation of the university's expertise in entrepreneurship through the Erasmus Centre for Entrepreneurship. This provides instructive insights and options for transfer to one's own university in terms of further developing existing curricular entrepreneurship programmes as well as building self-sustainable entrepreneurship centres based on a resource-efficient set-up of premium education activities together with external entrepreneurs as educators.

Case study fact sheet

| | |
|---|--|
| ■ Full name of the university, location: | Erasmus University Rotterdam, Rotterdam, Netherlands |
| ■ Legal status | Public |
| ■ Location: | Rotterdam |
| ■ Year of foundation: | 1973 |
| ■ Number of students: | 22,538 Bachelor students, 13,127 Master students (31/12/2021) |
| ■ Number of employees: | 3,885 (31/12/2021) faculty and support staff; total |
| ■ Budget in most recent financial year: | 752 Million euro (in 2021, with additional funding due to Covid) |
| ■ Academic profile: | The university is home to the Erasmus School of Economics (ESE), Rotterdam School of Management (RSM), Erasmus School Law School (ESL), the Erasmus School of Social and Behavioural Sciences (ESSB), The Erasmus School of History Culture and Communication (ESHCC), the Erasmus School of Health Policy and Management (ESHPM), Erasmus School of Philosophy (ESPIL), Erasmus University College (EUC), Erasmus Medical Centre (EMC) and the International Institute of Social Studies in The Hague (https://www.eur.nl/en/about-eur/faculties-and-schools) |
| ■ Entrepreneurial profile: | Erasmus University Rotterdam offers entrepreneurship master programmes in both entrepreneurial management and economics and has an excellent ranking in entrepreneurship research. Extra-curricular entrepreneurship activities are hosted by the university's Erasmus Centre for Entrepreneurship (ECE, https://ece.nl) |
| ■ Activities focused on in this case study: | Advancement of curricular corporate entrepreneurship master (including a new business development course with external business entrepreneurs); institutional establishment of a self-sustainable entrepreneurship centre through scalable entrepreneurship education and training offers (the Get Started programme to coach start-up founders is discussed in detail) |
| ■ Case contact person(s): | Ferdinand Jaspers, Farshida Zafar, ECE |

The status of information provided in this case study is October 2022 unless stated differently.



17.1 The university's entrepreneurship education profile

17.1.1 The university's overall approach to entrepreneurship education

In the history of Erasmus University Rotterdam, the business community of the City of Rotterdam and individual entrepreneurs played a central role in the University's initial foundation back in the early days of the 20th century – and today entrepreneurship at Erasmus University builds on its humanistic entrepreneurial tradition with the mission to empower entrepreneurs.¹ In terms of entrepreneurship education (EE) in particular, the University has a unique and strong footprint in teaching and research of entrepreneurial management through the **Rotterdam School of Management (RSM)** and entrepreneurial economics at the **Erasmus School of Economics (ESE)**. The established undergraduate and postgraduate degree programmes in entrepreneurship are without doubt insightful on their own terms.² The case will zoom in on the rationale of further developing an entrepreneurship teaching profile with a master programme in Strategic Entrepreneurship. This programme also takes corporate entrepreneurship on board and addresses new target groups for EE such as small business owners, corporate intrapreneurs, and innovation or business development managers.

Integrating corporate entrepreneurship to the curricular and extra-curricular teaching and training portfolio in addition to start-up and scale-up entrepreneurship is also a key aspect for the university's **Erasmus Centre for Entrepreneurship (ECE)**. ECE is a company fully owned by the university and serves as the central hub for entrepreneurship in close cooperation with RSM and ESE. Although the centre is affiliated with Erasmus University, it is positioned as a hub and has its own campus in the West of Rotterdam. ECE's path towards a self-sustainable entrepreneurship centre is funded internally through its own extra-curricular education and service offerings (see 17.4 further below). ECE's entrepreneurship training and coaching formats are delivered together with a community of academics, entrepreneurs, and other stakeholders contributing to the hands-on and practice-oriented approach in extra-curricular EE within the centre (17.3). In sum, this case is about further development of curricular entrepreneurship programmes within university faculties and establishing extra-curricular entrepreneurship training in an entrepreneurship centre in close cooperation with a community of entrepreneurs.

17.1.2 Leadership and governance

Importance of government strategies

Before 2010, the Dutch government supported the establishment of entrepreneurship centres at higher education institutions in a number of regions and education institutions of the Netherlands, with Erasmus University Rotterdam amongst them. For the province of Zuid-Holland (South Holland) Erasmus University co-operated with two other universities, Delft University of Technology and Leiden University, in a programme called **HOPE** (Holland Program on Entrepreneurship; HOPE Entrepreneurship, 2011). Although the organisation of the entrepreneurship infrastructure changed significantly with the advent of the ECE in 2013 (see 17.4.1 on organisational change), the HOPE programme

¹ See <https://ece.nl/about/>.

² Section 17.2 below will discuss the degree programmes and one course in the entrepreneurship master in detail.



has been instrumental in funding some of the university's and ECE's extra-curricular entrepreneurship education activities. Since 2015, one of the entrepreneurial objectives is to run the ECE on a self-sustaining economic basis in close co-operation with the University, however, without taxpayers' money from the public part of the University.³ Today, ECE is a self-sustaining company known not only for its excellent in-company trainings and extra-curricular programmes in the region, but also on a national and international level.

Importance of entrepreneurship in the university's strategy

Reportedly, the ECE has been created in a bottom-up initiative by entrepreneurial students, graduates, and academic staff with the university – as an education institution – buying into the centre's mission to empower entrepreneurs in a people-oriented approach. Further, strategies implemented by ECE to valorise education activities (e.g., offering entrepreneurial training and consulting to business entrepreneurs) is becoming increasingly important for the faculties of Erasmus University (e.g., the Medical School and the Rotterdam School of Management) as government funding for regular (curricular) education activities decreases. For this valorisation, ECE's community of entrepreneurs taking entrepreneurship education is an important target group.⁴

Level of faculties' and units' autonomy to act

ECE as the central entrepreneurship unit of the University is independent in organising and running its entrepreneurship activities – “university leaders gave us the opportunity to build the ECE ... and provided a mandate to do things”, as one interviewee phrased it. At the same time, ECE has been set up as a company fully owned by the university. Through ECE's board of directors, which includes the deans of the RSM and ESE, the centre is firmly anchored also at the faculty level. In fact, the link to RSM and ESE is essential for the validation and reputation of ECE's activities (e.g., the design of entrepreneurial training programmes with academic experts in the field of entrepreneurship from the management and economics faculties). In 2022, over 35 academic trainers are affiliated with the centre. Some of these academics are affiliated with the EUR while others come from industry. The relationships with ESE and RSM have remained close.

Organisational implementation

With the establishment of the ECE as a hub within the university, entrepreneurship is organised centrally (see 17.4.1 for this development). Most importantly, ECE organises, operates, and markets all extra-curricular entrepreneurship education activities under one common ECE brand in co-operation with the business and economics faculties who run their curricular entrepreneurship modules and degree programmes (see 17.2). The centre also provides facilities to accommodate start-up businesses, host events on the ECE campus in the Rotterdam Science Tower (17.3.4), and teams up with the ECE students' association to bring entrepreneurship to Erasmus University students on campus. More recently, ECE set up the ScaleUp Dashboard and, based on the insights from the ScaleUp Dashboard, ECE presents the fast growing companies in the Netherlands in an

³ Note though that public funds, e.g., from the EU, have been employed to finance the initial establishment of the centre's operations in 2013 and 2014.

⁴ See also sections 17.3 and 17.4.1.



annual report. The strategic implementation of ECE has been to build a showcase of an up-and-running entrepreneurship centre in co-operation with two departments (RSM and ESE) and to take things from there to get other university departments on board as their students show an interest in entrepreneurship.

17.1.3 Resources: people and financial capacity

Human resources for entrepreneurship education

Given that Erasmus University has a long-standing tradition and track record in entrepreneurship, both in entrepreneurial management and economics, there are numerous faculty members involved in teaching and researching entrepreneurship in different degree programmes⁵. The extra-curricular activities run by ECE are supported by the centre's management and operative team of around 17 people and more than 35 academic trainers and facilitators affiliated with either the Erasmus University or an industry partner.

Financial resources for entrepreneurship education

Most importantly, the entrepreneurship centre aims to run its activities on a self-sustaining basis by offering paid education formats (e.g., entrepreneurship trainings) and renting out its facilities to business. Initial public funds from the EU have been employed to setup the centre and finance growing education formats to run on a sustainable basis in the future (see 17.4.1). Curricular entrepreneurship education at the faculty level is supported by regular government funding and tuition fees of enrolled students. In the past seven years, ECE has grown into a self-sustained company funding its educational activities and events on its own.

17.2 Entrepreneurship in curricula and teaching

17.2.1 Overview about curricular offers

As a Continental-European institution of higher education Erasmus University Rotterdam has a long tradition in offering entrepreneurship education to students on campus as well as to the wider community of entrepreneurship stakeholders. Regarding curricular entrepreneurship, Erasmus University offers entrepreneurship electives at the bachelor level and fully-fledged master programmes in entrepreneurship for postgraduate master students.

For **bachelor** students at Erasmus University, the Rotterdam School of Management and the Erasmus School of Economics offer four campus-wide electives to undergraduates:⁶

- a) Minor Entrepreneurship: Start Up Your Own Business!
- b) Minor New Economic Thinking & Social Entrepreneurship
- c) *Minor* Innovation and Marketing

⁵ See <https://ece.nl/team/> and, in particular for the University's prominence in applied entrepreneurship research, <https://ece.nl/research/>.

⁶ For minors in entrepreneurship see <https://www.eur.nl/en/education/minor/overview?s=entrepreneurship>.



d) *Minor Learning by Doing: Consulting to Social Entrepreneurs*

A notable characteristic of entrepreneurship at Erasmus University is the strength of its teaching and research faculty being well versed and established in both entrepreneurial management as well as entrepreneurial economics. Correspondingly, entrepreneurial management and economics **master** studies are well established in three programmes:

- a) *Strategic Entrepreneurship* (offered by RSM).⁷
- b) *Entrepreneurship and Strategy Economics* (by ESE).⁸
- c) *Cultural Economics and Entrepreneurship* (at the Erasmus School of History, Culture and Communication, ESHCC).⁹

Exhibit 1 provides a selection of important curricular EE offers at the course level.¹⁰

Exhibit 1: A selection of curricular EE offers at the Erasmus University Rotterdam

| No. | Name | Objectives | Target group |
|-----|---|---|---|
| | <i>Master level</i> | | |
| 1 | Start Up & growth (RSM; Master <i>Strategic Entrepreneurship</i>) | After the course students will a) <i>will understand the importance of numerous key steps, activities and challenges in the process to start and grow new ventures, (b) assess the complexity of the start-up & growth process, (c) understand that start-ups are based on numerous assumptions, that the start-up process is one of testing those assumptions and turning them into knowledge (d) identify the major challenges entrepreneurs have in growing their companies, (e) define the most important financial instruments for company growth, (f) list and compare the major strategies for company growth, etc.</i> | RSM master students in Strategic Entrepreneurship and other RSM master programmes |
| 2 | Entrepreneurial Skillset (RSM; Master <i>Strategic Entrepreneurship</i>) | <p><i>Understand the dynamics of the entrepreneurial process and learn best practices for customer development.</i></p> <p><i>Learn and apply a set of interviewing best practices for customer discovery</i></p> <p><i>Learn the characteristics of effective team formation and recognize a team profile, identifying core strengths and areas for improvement.</i></p> <p><i>Engage with a set of negotiation techniques and influence tactics and learn how to apply them to improve start-up's outcomes.</i></p> <p><i>Identify the right balance of roles, rewards and relationships in a start-up and learn how to discuss them best when setting up a team.</i></p> <p><i>Understand the set of entrepreneurial skills, necessary at different stages of the idea validation process</i></p> <p><i>Develop self-awareness into an entrepreneurial skillset and its strengths and areas for improvement, based on reflection and action learning tools</i></p> | RSM master students in Strategic Entrepreneurship |

⁷ See <https://www.rsm.nl/education/master/msc-programmes/msc-strategic-entrepreneurship/>.

⁸ See <https://www.eur.nl/en/ese/master/strategy-economics/curriculum>.

⁹ See <https://www.eur.nl/en/eshcc/master/cultural-economics-and-entrepreneurship>.

¹⁰ The course descriptions in the exhibit are based on the corresponding syllabus texts from the websites of Erasmus University's master programmes and bachelor minors in entrepreneurship.



| | | | |
|-----------------------|---|--|---|
| 3 | Corporate Entrepreneurship (RSM Master Strategic Entrepreneurship) | <i>The main objective of the core course is to develop an awareness and understanding of the range, scope, and complexity of the issues related to the creation of an organizational environment that is supportive of entrepreneurial endeavors as well as to gain insight concerning the effective implementation of technological and organizational new business development in a corporate setting.</i> | RSM master students in Strategic Entrepreneurship |
| 4 | Economics of Innovation (ESE; Master Strategy Economics) | <i>after this course students will be familiar with concepts, ideas and theories related to the emergence and development of innovation and will be able to apply these to real life examples of innovating firms. Furthermore, students will have learned to understand and interpret empirical articles and to use its findings to develop strategic advice for different types of firms (e.g., small firms or large firms) such as on how to improve their innovation and growth performance.</i> | ESE master students in Strategy Economics |
| 5 | Economics of Strategy (ESE; Master Strategy Economics) | <i>The course integrates insights from industrial organisation and strategy research while building upon a strong theoretical and empirical foundation. 1. First, the course discusses the concept of real options as a tool to make investment decisions under uncertainty. 2. The second part examines investments in research and development and advertising. 3. The last part analyzes strategies for particular types of goods and industries. The topics are of interest to anyone with both a theoretical and a professional interest in strategic decision making at the firm level. As the course will use basic micro-theory, some knowledge in this field (monopoly, oligopoly, Stackelberg, perfect competition) and the associated mathematics (e.g., basic rules of differentiation such as the product rule and the chain rule) and statistics (probability theory) is required.</i> | ESE master students in Strategy Economics |
| <i>Bachelor level</i> | | | |
| 6 | Entrepreneurship: Start up your own business! (RSM; Bachelor Minor) | <i>Understand and apply the principles of effectuation and value proposition design. Mobilize resources to build a viable company with a long-term vision. Effectively build a start-up team, and communicate, cooperate and solve problems in a team. Apply a series of tools and develop entrepreneurial skills.</i> | Bachelor students at Erasmus University and other universities |
| 6 | New Economic Thinking and Social Entrepreneurship (ESE; Bachelor Minor Economics) | <i>The ESE entrepreneurship minor offers a bird's eye view on the role of entrepreneurship in the economy and in society; from a managerial economics perspective, students also learn how to evaluate and write business plans for new ventures or small businesses at the micro level; at the macro level students gain insights into entrepreneurship policy and the characteristics of an entrepreneurial economy</i> | Bachelor students at Erasmus University and other universities. |



As noted in the introduction to EE at Erasmus University in section 17.1.1, its EE positioning was changed in 2015. In particular, the flagship M.Sc. programme in entrepreneurship run by the RSM faculty has been adapted and renamed from “Entrepreneurship and New Business Venturing” to “**Strategic Entrepreneurship**”. The rationale behind this repositioning in terms of the university’s intentions towards curricular EE is addressed in section 17.2.3. The context of overall organisational change in its approach towards entrepreneurship with the new Erasmus Centre for Entrepreneurship at the university is discussed in 17.4.1. Extra-curricular education with regard to new venture creation and start-up support in the first place is now domiciled within the entrepreneurship centre (see section 17.3.3). The focus of the new strategic entrepreneurship Master effective from spring 2015¹¹ is more on **corporate entrepreneurship**, in particular including business development and innovation in existing businesses and established corporations. Within the main part of this chapter on central decisions in the design of curricular EE offers (section 17.2.3), the focus will be on this change. In particular, the case study is to portray one of the elective courses in the strategic entrepreneurship master – “New Business Development (NBD)”.¹² The NBD course is an example of the approach of Erasmus University – and in particular of the ECE and RSM – to actively involve the community of entrepreneurs in teaching based on real business development challenges of (corporate) entrepreneurship.

Since 2015 a lot has changed within the educational landscape of Erasmus University in general and entrepreneurship education in particular. ECE has managed to grow and gain a track record in entrepreneurial education. In recent years, ECE has set out to create a positive impact across the globe. Educational activities to support the global impact include train-the-trainer programmes in Africa and Asia. On a national level, ECE is recognised as the leading centre for entrepreneurs in Europe and the Netherlands. In addition to the train-the-trainer programmes, ECE offers customised programmes for public and private organisations and other university partners. Within the curricula of RSM and Erasmus University College, more specifically the minors at those faculties, ECE supports the development of an entrepreneurial mindset and skills.

17.2.2 Target groups

Main target groups of entrepreneurship education

Erasmus University serves the **wider community of entrepreneurs** (or those interested in establishing and growing their own business) as well as **students at the university** (ECE, 2013). The extra-curricular training and education services offered to people from outside the university (and some also for internal students, e.g., the Get Started programme) will be discussed in detail in 17.3 below. In terms of (potential) internal participants in curricular EE on campus, the entrepreneurship-related bachelor electives are offered for students from all disciplines within Erasmus University; namely, these are the entrepreneurship minors offered by RSM and ESE. The entrepreneurship minors are part of a rich set of minor electives to be chosen from by bachelor students at the

¹¹ See <http://www.rsm.nl/master/msc-programmes/msc-strategic-entrepreneurship/> again.

¹² The “New Business Development” master course has in fact also been part of the former entrepreneurship master programme in new business venturing. This is also why it has been selected as a course to be presented in detail based on an established course history.



university.¹³ In the interviews it was reported that ECE has established further entrepreneurship minor electives in collaboration with different Erasmus faculties and schools, such as Erasmus University College.

At the post graduate level, the distinct entrepreneurship masters at RSM and ESE are offered for students having finished their first degree and seeking further training and education. Some of the electives in these master programmes are also open to other master students from the same faculty, providing access to entrepreneurship also for students outside the main entrepreneurship masters. Typically, the master programmes at RSM and ESE are fairly international in terms of their respective groups of students and programmes are offered in English.¹⁴ For example, in the most recent year of study in the RSM entrepreneurship master (57 students) around 55% of students had an international background.¹⁵

Continuous education

ECE and Erasmus University offer a wide range of further education formats for people coming back to university (lifelong learning programmes) to learn about entrepreneurship and undertake training, e.g., in entrepreneurial management; these offers are mainly extra-curricular and will be addressed in 17.3 below. As regards curricular EE, commonly, business and economics master programmes are offered as formats of further education. In principle, this is also the case for the Strategic Entrepreneurship and Entrepreneurship and Strategy Economics master programmes of RSM and ESE; note though however, that these degree courses are also conceptualised as pre-experience masters for students continuing postgraduate education immediately from their bachelor studies. At ECE there are separate Life Long Learning programmes with certification: [Leading Innovation Excellence](#) (focussed on innovation within organisations), an open programme where individuals can take different modules, and a customised programme tailored to the needs of the organisation (<https://ece.nl/education/>).

ECE's offerings in continuous education are managed independently in the centre by a member of ECE's management team responsible for education affairs. These activities include the college and training weeks as well as the master classes and boot camp activities held on a regular basis within the ECE community.

17.2.3 Designing lectures and courses – basic curricular decisions

Intentions

Curricular entrepreneurship education at Erasmus University in general has been centred mainly on start-up creation, development, and economic policy support. This has been with a focus on creating awareness for entrepreneurship as a career option and its role in the economy at the *bachelor* level (Erasmus Centre for Entrepreneurship, 2013). Focussing on entrepreneurial competencies, Erasmus Centre for Entrepreneurship plays a big role in designing the courses with several schools at EUR. At the core of the

¹³ See <https://www.eur.nl/en/education/minors>.

¹⁴ Bachelor studies in the area of management and economics are offered both in Dutch and English with the entrepreneurship minor electives usually being offered in English (since they are open to bachelor students from different faculties).

¹⁵ See <https://www.rsm.nl/education/master/msc-programmes/msc-strategic-entrepreneurship/>, link to factsheet at the bottom.



activities is the development of a portfolio of entrepreneurial skills to support student entrepreneurship through a practice-oriented curriculum. Within all courses there is a combination of “thinking and doing” aimed at developing students’ ability to think and assess critically and allow for a hands-on experience in what it means to be an entrepreneur. Supporting nascent and early-stage student entrepreneurship is, of course, still supported and in the focus of the university – the creation and support of growth-oriented ventures is organised within the ECE (see **Error! Reference source not found.**). Since 2015, the positioning of the curriculum of the master programmes at RSM has shifted towards corporate entrepreneurship and entrepreneurial strategy in the context of established firms. This curricular change within the degree programme has reportedly been initiated to meet the needs of students and companies: alumni of the programme were found to frequently have corporate entrepreneurship careers (rather than founding their own business), working in innovative entrepreneurial roles in SMEs or larger companies (e.g., in innovation management or corporate business development)¹⁶. Therefore, including elements of corporate entrepreneurship in the curriculum fits with the training needs of both students and companies.

Contents

The focus of the case study is more on the institutional establishment and extra-curricular EE activities of the ECE; however, as noted in the overview above, ECE also collaborates with several schools in their quest to embed entrepreneurial thinking and doing in their curricula. This section will highlight the minor in Entrepreneurship at the Erasmus University College (EUC). The reason to present this course is to showcase that entrepreneurial competencies are needed in all disciplines and are not solely restricted to the curricula within business schools. To put the course in context, the course takes place in the third year of the BA at EUC. Although EUC focusses on liberal arts and sciences, they have acknowledged the importance of entrepreneurial competencies and have joint forces with ECE to develop a ten-week course on the topic of entrepreneurship.

For this course a maximum of 20 students are allowed to join. These students have no background in business or entrepreneurship. Therefore, they need more guidance and training than the usual business students.

The focus throughout the course is on students to master real-life business development projects in teams, in co-operation with external companies and under guidance of the ECE education team. In addition, the faculty staff takes the lead when it comes to transferring knowledge and the core theories in the business field. Students learn to work in teams, discuss and solve business cases and problems. In this course, ECE offers workshops on the essentials for any start-up: i.e., ideation and design thinking, understanding markets and feasibility, business model canvas, and a pitching workshop. Furthermore, ECE provides feedback rounds and coaching for the registered students.

The course outline and input of business opportunities is usually organised in advance before the course starts, by the course co-ordinator of EUC. This input stems from the Faculty’s network of entrepreneurs and businesses that work together with EUC and ECE. Student teams will be formed by the course coordinator from the University based on students’ preferred projects. However, team selection will also appreciate student business expertise and aim for a maximum of team diversity also in terms of study

¹⁶ This was discussed in the on-site interviews; see also <http://www.rsm.nl/master/msc-programmes/msc-strategic-entrepreneurship/your-future-career/>.



background, gender, and nationality. Setting of business development projects and team establishment are organised before the start of the course in order to ensure effective use of time during the course for the business challenge itself and the collaboration with the companies involved.

Methods

In the Minor in Entrepreneurship presented above, the practical approach plays a major role. Correspondingly, real-life experiences both in terms of presenting challenging business opportunities to students by the companies (e.g., entrepreneurs or managers) and the work of student teams on the projects and reporting this to peers and instructors are important methods in class. Teaching management instruments and theory relevant to the projects (e.g., business models) follows a flipped classroom format where students study input material (texts, illustration cases) at home while contact time in class is utilised for class discussion, reporting and feedback on the business development projects of student teams.

Action-based, practical approaches are a principal focus on teaching entrepreneurship at Erasmus University Rotterdam. In the entrepreneurship minor, in particular an effectuation perspective operating on a (realistic) small resource base is employed so that students “will personally experience what it takes to become an entrepreneur by dreaming up their own business idea in a team of students and will develop this idea into a real business under the supervision of expert entrepreneurs”.¹⁷ The experiential learning approach allows students to obtain skills, find relevant knowledge, and build a network to navigate the entrepreneurial journey. Allowing students to build, measure and learn through this experience also stimulates students to take risks and be more creative.

Using results of entrepreneurship research

Erasmus University's track record in both the management *and* the economics perspective of entrepreneurship is surely unique. This also holds for the educational activities by RSM and ESE respectively having established full master degree courses in both domains which have been recognised for their strong underpinning in entrepreneurship research.¹⁸ The two faculties use and leverage their expertise in entrepreneurship research also in education, offering degree programmes for careers in both general (entrepreneurial and innovation) management and entrepreneurship and SME policy positions. In practice, research output and teaching entrepreneurship are linked, for example in qualitative research studies on the innovation and entrepreneurial activity of SMEs conducted by RSM where authorised company cases are in turn used in class discussion or offer scope for management projects by student teams in experiential courses like New Business Development.

17.2.4 Setting of entrepreneurship teaching

Locations

Commonly, curricular entrepreneurship teaching takes place at the Erasmus University campus. However, in courses like Entrepreneurship: start your own business! learning

¹⁷ See <http://www.eur.nl/minor/minoren/faculteit/rsm/entrepreneurship>.

¹⁸ See (see <https://www.erim.eur.nl/research/news/detail/3469-erasmus-university-rotterdam-ranked-first-in-research-on-entrepreneurship/>).



will take place also at the premises of the external business stakeholders involved. Some of the curricular education also takes place at the Erasmus Centre for Entrepreneurship in the context of ECE's entrepreneurship activities in the Rotterdam Science Tower (see 17.3.4 below). Within the Rotterdam Science Tower, the ECE's learning environment spans 10,000 square meters, one third of the tower. It is home to over 100 innovative companies and hosts over 30,000 visitors per year in events and educational activities.

Formal evaluation of learning outcomes

Formal assessment in the focal New Business Development course is a straightforward mix of deliverables contributing to students' overall grading. Following an experiential learning format, the final assessment is based mainly on students' written business development plans from their company projects, an interim report, and a final presentation of project results (with additional team assignments on a pass/fail basis). Some of the evaluation concerning the presentation and reporting on the business development projects with the companies is conducted by the external entrepreneurs and business managers themselves.

17.2.5 Instructors: teachers and mentors

Professors, other employees and external lecturers of the university

There is a strong human resource base of academic research and teaching personnel in entrepreneurship at RSM and ESE. In fact, “[t]he Erasmus School of Economics was the first faculty in the Netherlands to establish a chair in entrepreneurship”, and today there exist three professorships in entrepreneurship and more than 30 researchers are involved in the field (ECE, 2013, 6). Academic staff comprises research, teaching, and dual positions which are either directly associated with the entrepreneurship units of RSM and ESE or work in adjacent fields like technology management or economics of innovation. For an overview of entrepreneurship personnel in RSM's Department of Strategic Management and Entrepreneurship and ESE's Department of Applied Economics (which is also home to the entrepreneurial economics staff of the faculty).¹⁹ Beyond the two business and economics faculties, there are also people from other faculties involved in teaching entrepreneurship sessions.

“Real entrepreneurs” as teachers

Expert entrepreneurs and intrapreneurs from SMEs and innovating larger companies are involved in teaching entrepreneurship as an integral part of curricular courses such as New Business Development or the entrepreneurship minor, as well as of extra-curricular programmes such as Get Started (see 17.3.3 and 17.3.5 below). In the focal New Business Development course, entrepreneurs take on a coaching role providing input, guidance, and feedback to the student teams working on the project challenges related to their businesses as well as to the other teams in class (e.g., in the final presentation of end results of all project challenges). When involving entrepreneurs in its entrepreneurship teaching programmes, the university taps its substantial network and

¹⁹ See <https://www.rsm.nl/faculty-research/departments/strategic-management-and-entrepreneurship/> and http://www.eur.nl/ese/english/departments/department_of_applied_economics/staff/faculty/.



community of entrepreneurs and SME owner-managers who are involved in regular ECE activities.²⁰

17.3 Extra-curricular activities related to entrepreneurship education

17.3.1 Overview about extra-curricular entrepreneurship activities

Erasmus University Rotterdam offers a range of extra-curricular EE formats; some of them pioneered by the University and expanded internationally like the famous “Get in the Ring” investment battle format for entrepreneurs. Educational activities are offered in addition to regular undergraduate and postgraduate curricula.

In recent years ECE has diversified their offerings in extracurricular activities for students. Based on experience and academic research ECE has designed a few interactive programs to help student entrepreneurs in their journey.

Exhibit 2: Overview about extra-curricular EE activities at the Erasmus University Rotterdam

| No. | Name | Objectives | Target group |
|-----|--|--|---|
| 1 | TSEP: talented student entrepreneur programme (https://ece.nl/tsep/) | <i>For ambitious student entrepreneurs who want to combine their studies with running their startup, the Talented Student Entrepreneur programme allows you to organise your study obligations together with a personal study advisor while having access to the resources needed to grow your business</i> | <i>High-potential student entrepreneurs from Erasmus University in combining their studies with running their businesses.</i> |
| 2 | student founders programme (https://ecestudents.nl/student-founders-programme/) | <i>The Student Founders Programme, or SFP for short, is an immersive 10-week programme with workshops and networking sessions with industry partners. This program is hosted by ECE students.</i> | Erasmus University students |
| 3 | Talents united | <i>Talents United is an initiative by <u>YES!Delft</u> and <u>Erasmus Centre for Entrepreneurship</u> and part of the efforts of <u>Erasmus Enterprise</u> to boost entrepreneurship across Erasmus University Rotterdam, Erasmus Medical Centre and TU Delft</i> | Students from Tu Delft and EUR |
| 4 | Idea2Impact Company (https://ece.nl/idea2impact/) | <i>Idea2Impact Company is a five-day programme that provides learners with the tools that every successful entrepreneur needs to make an impact. The tools support the translation of an idea into a successful startup. In addition, trainings are offered to maximise the social or ecological impact of a startup. <i>The lessons aim to help aspiring</i></i> | Students in the Rotterdam-The Hague region, university students of students of a university of applied science. |

²⁰ Mentoring activities by experienced entrepreneurs and managing support of students' start-ups is explicitly organised in extra-curricular formats at ECE and is thus discussed in 17.3 below.



| | | | |
|---|--|---|---|
| | | <i>entrepreneurs take the last step to realising a long-lasting impact.</i> | |
| 5 | Erasmus Start it up (https://ece.nl/startitup-2/#courseinformation28e6-e636) | <i>Erasmus Start It Up is an intensive one-day programme that empowers start up entrepreneurs to validate and find direction in their startup idea(s). The training includes implementation processes, value proposition and customer needs and wants.</i> | Start-up entrepreneurs |
| 6 | Start up visa facilitator (https://ece.nl/startupvisa-facilitator/) | <i>Erasmus Centre for Entrepreneurship is a recognized RVO* startup facilitator for international innovative startup entrepreneurs. A facilitator is a business mentor that provides the entrepreneur with support. Having a facilitator is one of the official conditions for getting a startup visa. With a startup visa, international startups have one year to start an innovative company in the Netherlands.</i> | Entrepreneurs from all over the world who want to launch their company in The Netherlands. |
| 7 | Build to Scale programme (https://ece.nl/buildtoscale/) | <i>The 12-week programme consists of a dynamic mix of practical and technical masterclasses, real-life business cases and workshops that address company-specific challenges and plans for improvement. During three interactive, one-day modules, learners will learn from peers and leading professors from Rotterdam School of Management, Erasmus University.</i> | <p><i>This course caters to motivated scaleup entrepreneurs who want to work on their personal and business growth.</i></p> <ul style="list-style-type: none"> • <i>The programme is tailored for scaleups growing fast and want to sustain this steep growth path over time</i> • <i>The company has at least 25 employees and/or 2.5 million annual revenue</i> • <i>the company grows at least 20% in FTE and/or revenue per year</i> |

Extra-curricular activities are hosted and organised by the ECE in co-operation with the faculties of the university, in particular RSM and ESE. In fact, extra-curricular offers are conceptualised and validated by academics from the business and economics faculties of Erasmus University with regard to their content and achievement of learning objectives (for example intensive *training reeks (series)* for entrepreneurs and small-business managers or the *Get Started* programme for start-up entrepreneurs; see 17.3.3). Typically, the training sessions, lectures, and workshops in these programmes are co-ordinated and run together with faculty staff and entrepreneurs from the ECE community. One important aim in designing and establishing these extra-curricular programmes is their scalability, offering some of them countrywide in the Netherlands and, partly, also in the international arena.



In their mission to empower entrepreneurs and putting people centre-stage in education, the University and ECE offer extra-curricular activities for different target groups alongside the entrepreneurial life cycle.²¹

17.3.2 Target groups of extra-curricular activities

In the past, the University's extra-curricular entrepreneurship education efforts focused on its own campus with potential students, former graduates, and staff interested in starting their own business constituting the main target group. Today, the University's entrepreneurship centre increasingly also focuses on business owners, SME managers, and corporate managers, triggering these target groups also to follow continuous academic education (e.g., in personal training programmes or workshop formats). Within the ECE there is the belief that concentrating education offers mainly on corporate entrepreneurship contexts adding to traditional start-up education will make the most significant impact on fostering entrepreneurship in the region around Erasmus University Rotterdam. This will also pave the way for the centre's further financial sustainability by offering paid education. The people participating in the education programmes from the domain of established companies are typically managers and management teams working in new business development, product development, or business innovation in their corporate roles.

With ECE's community approach attracting people from this target group to become a network member, some of these experienced entrepreneurs and managers later also contribute to entrepreneurship education for students (e.g. in providing study projects in new business venturing and development or acting as coaches to campus start-ups and as instructors in team-teaching curricular entrepreneurship courses; see the section on using the results of extra-curricular activities in entrepreneurship education in 17.3.3 below).

17.3.3 Designing extra-curricular activities

Intentions

Overall, ECE's activities are aimed at covering (further) entrepreneurship education needs along the entrepreneurial life cycle from student start-ups, growing small businesses, scaled-up companies, to corporate entrepreneurship in established large companies. This involves changing personal education needs ranging from managing initial start-up challenges, functional management issues in small business finance and marketing, to training needs for personal leadership in growing larger organisations. These education contexts are addressed through extra-curricular education services offered by the ECE and a selected example offer is described in detail in the next section.

Some of the activities are organised in a concise form (such as the one day bootcamp Erasmus Start Up: <https://ece.nl/startitup-2/>) with the objective of helping start up entrepreneurs with the right the tools to validate and find direction for their ideas. In addition, ECE offers a wide arrange of intensive programmes to further develop skills, an entrepreneurial mindset and innovation drivers for private-public organisations (e.g., Leading Innovation Excellence programme <https://ece.nl/leading-innovation-excellence/>).

²¹ Ranging from student start-up founders via growth-oriented SME entrepreneurs to intrapreneurs in large companies; see <http://ece.nl/programmes/>, and <https://ece.nl/about/> for extra-curricular EE offers.



These activities include small scale learning over a period of weeks or months, depending on the needs and wants of the learner, feedback, peer learning and coaching. In most programmes academics from EUR, alumni and industry partners are enlisted as instructors or coaches.

Contents

As noted in 17.3.1 above, the university offers numerous extra-curricular entrepreneurship education activities through its ECE for different target groups and in different time formats. And ECE has chosen to enlarge the scope of entrepreneurship education also to embrace corporate entrepreneurship in its education portfolio, while education and support of start-up entrepreneurs also still plays an important role. All programmes are hosted and run by ECE. A lot has changed at ECE since 2015. In the past years ECE has managed to build an extensive quadruple helix ecosystem. The partnerships have played a crucial role in establishing ECE as the centre for entrepreneurship in The Netherlands. Furthermore, the partnerships have been very fruitful for the research and the educational portfolio.

One of ECE's extra-curricular activities will be presented in detail in this case – the Talented Student Entrepreneur Programme. *Get Started* programme for nascent entrepreneurs. A further programme, StEEP, will be discussed in section **Error! Reference source not found.** on managing student support for entrepreneurship.²²

“Similar to support programmes for students who are competitive athletes, the Talented Student Entrepreneur Programme assists high-potential student entrepreneurs from Erasmus University in combining their studies with running their businesses.”

Students are offered support on a practical level (e.g., all participants have access to a personal study advisor to help them with attendance requirements), and gain access to the ecosystem where they can build their own network and find investors. In addition, a large community of peers enables students to find like-minded people and creates a sense of belonging. Last but not least, students are also offered a business membership that comes with a workspace. The main goal of the program is to empower students to combine the pursuit of an academic degree while setting up and running their own business. All too often students have to choose which one of these activities has priority over the other, mostly leading to either dropping out of university or failing in their business. With this programme, students are supported in reaching both their entrepreneurial and their academic goal.

The programme is facilitated and coordinated by the ECE team. Other EUR schools play a role in the practical support e.g., a dedicated study advisor from a school who helps the student in aligning study duties and business obligations. A personal mentor helps the students in achieving growth and finding the direction for their business. And a network of experienced entrepreneurs and TSEP alumni offers insights and expertise. Since this programme is designed to facilitate the most ambitious students, there is an application process in place. This process starts with a screening of the student entrepreneurs to determine where they are with their business plans and/or idea and when joining the programme would be best for them. After the screening, students are directed to a dedicated study advisor within their own school to help them align tasks and responsibilities. They will also have to pitch their plan at the ECE campus in front of a jury in order to determine the level of support needed. The final step is the admission to the

²² As described on its website <https://ece.nl/tsep/>.



programme. Some of the previous TSEP student-entrepreneurs include the founders of Seepje, Ekster, VR Owl, Checq, Celestial Footwear, Fray.it and AmericanCups.

Methods and media

All students are assigned a case manager who will help them navigate both academic and entrepreneurial obligations. In addition to personal guidance, students take part in workshops, seminars, pitching events and network activities to gain knowledge and build a network. Depending on their personal journeys students will be offered study materials and additional tools.

Using results of extra-curricular activities of entrepreneurship education

Frequently, start-up founders, small business entrepreneurs and corporate intrapreneurs who follow an extra-curricular programme at ECE and become part of the ECE community later get involved in entrepreneurship teaching. This may be, e.g., by providing start-up or business development projects for class discussion and acting as instructors in curricular courses (in the entrepreneurship master and bachelor minors) or serving as consultants and mentors in programmes to support young start-up entrepreneurs. The ECE alumni community is also engaged in other activities outside of the educational tracks.

17.3.4 Setting of extra-curricular activities

Locations

A specificity of entrepreneurship at Erasmus University is surely the location and infrastructure of the ECE domiciled in the Rotterdam Science Tower. Located at the heart of the Rotterdam Makers District the ECE campus covers more than 10.000m². This includes the centre's own floor with teaching, meeting, networking spaces, and flexible offices as well as additional floors hosting the university's Start-up Campus offering a home base for the community of over 100+ innovative companies. ECE's facilities for accommodating education programmes, network events, and individual start-up teams are developed and managed by members of the ECE campus team.

Timing

Principally, time formats of the different programmes are designed according to the education goals of each specific activity and the requirements of the target audiences. For example, the training weeks have a regular schedule for participants to apply what they have learned between weekly two-hour sessions which take place in the morning hours before the entrepreneurs start the business day in their own companies. Where busy entrepreneurs are themselves integrated as coaches, e.g., in the TSEP programme, coaching sessions are matched with the needs of individual participants and coaches.

Most importantly, ECE aims to build bridges between the offers by meeting at ECE for different activities on the same day to enhance networking and community spirit. For example, sessions of some programmes or one-day events are organised around the regular Erasmus Start It event which is a reoccurring one-day bootcamp.

In addition, special community events are organised to enable exchange and peer learning within the Tower. With over 100 innovative companies residing at the Rotterdam Science Towers, and around 100 new entrepreneurs starting up their business,



community management and community building are essential. During Covid in 2020 and 2021 most of these events had to be cancelled. In 2022 the ECE team has started to pick up the pace with plans to host community lunches and evening sessions.

17.3.5 Persons involved in extra-curricular activities

In the above portfolio of extra-curricular entrepreneurship education activities different types of people are involved, both from inside and outside the university. Externally, entrepreneurs from the ECE community and expert trainers certified by ECE serve in coaching and training programmes. ECE brings these people on board to maintain flexibility and integrate expert knowledge from outside – “we do not need to do everything...rather, we, at ECE, put these things together accordingly” as one interviewee framed it. Internally, there are three pillars of personnel with different roles:

- Academic staff from university faculties and ECE who develop and design the structure and contents of programmes and who coordinate and teach in some of the activities such as in the training weeks.
- ECE Students (the student association of ECE; <http://ecestudents.com/>) who are involved in organising and operating activities to raise awareness for entrepreneurship amongst Erasmus University students and build a platform for social activities around entrepreneurship on campus.
- ECE education team, who manage and co-ordinate education affairs of the centre and who work at ECE facilitating and supporting individual education activities and the centre’s community and network of entrepreneurs.
- ECE research team, who conduct applied research related to different entrepreneurial topics. To ensure quality, there is an academic director with a proven track record in this field with ties to RSM.
- ECE campus team, who manage the facilities, community and events within the ECE campus.

17.4 Institutional aspects of entrepreneurship education

17.4.1 Organisational set-up and change

The Erasmus Centre for Entrepreneurship (www.ece.nl) is at the heart of the University’s further evolution towards anchoring entrepreneurship education in its organisation. The centre is organised as a company which is fully-owned by the University. Building upon academic knowledge and expertise of Erasmus University Rotterdam, ECE fosters entrepreneurship through practice-oriented research, education and training activities. The aim: *to drive innovation and growth and realise societal impact* at the university, in Rotterdam and region, the Netherlands and beyond.

Erasmus Centre for Entrepreneurship applies its philosophy within different target audiences. These include:

- Students: develop entrepreneurial skills to become more resilient in a fast changing world. Erasmus Centre for Entrepreneurship develops and provides entrepreneurial educational programmes on MBO, HBO and University level both national and international taking the learning approach Experiential Learning as its teaching method.



- Student entrepreneurs: entrepreneurial skills to identify opportunities and take strategic actions to exploit those opportunities. We develop and provide validation and incubation programmes for our own university (including TSEP) and others, national and international
- Professionals from the public and private sector: develop entrepreneurial skills to drive innovation in a complex environment to create opportunities and act on them. We offer Executive education programmes with the focus on innovation leadership and integral approach towards creating an entrepreneurial culture within organisations
- SME's and Scaleups leadership teams: develop entrepreneurial skills to develop the organisations to create and maintain healthy growing of a SME based on our (incl RSM) research into fast growing companies
- Public and semi-public organisations: create insight in how they can support groups of SMEs in a specific region and/or sector to create and manage growth, looking at company level, meso and macro level factors

In line with this strategy, we aim to further build relations with international partners in the field of entrepreneurship training and education in order to push Erasmus Centre for Entrepreneurship's branding as Europe's leading educator in the field of entrepreneurial competencies.

Measures for coordinating and integrating entrepreneurship education across the university

Institutionally, the ECE was founded and officially opened in 2013 as an entrepreneurship hub for the whole university and the region (see the timeline at <http://ece.nl/about/timeline/>). Historically, the centre has evolved from earlier institutionalisation activities related to entrepreneurship in the first decade after the millennium change. Namely, this has been through the HOPE programme initiated and funded by the Dutch government to build entrepreneurship centres and collaboration networks (see 17.1.1 above and HOPE Entrepreneurship, 2011). While the other two universities in the HOPE programme had specialised centres in supporting technology (Delft) and medical (Leiden) start-up entrepreneurship, Rotterdam, at that time, had many different activities and people involved in entrepreneurship within its faculties and on the Erasmus campus.

This de-centralised structure of entrepreneurship activities scattered across the University organisation in the HOPE programme impeded co-ordination and has been changed significantly with the emergence of the ECE as a new platform. While the initial structure at the time of the HOPE programme may be called "radiant", today the university with its ECE has a centralised "magnet" approach co-ordinating and branding entrepreneurship education activities to external stakeholders and the community of entrepreneurs under one roof and name. Internally, ECE has the central task of aligning the interests as well as the offered curricular and extra-curricular activities across the different university partners and customer groups involved, in particular (see 17.2 and 17.3):

- The RSM and RSE faculties with their curricular entrepreneurship education and research programmes.
- The ECE Students' board representing students interested in entrepreneurship, and externally.



- The business community of start-up and corporate entrepreneurs participating in entrepreneurship training offered by ECE

This collaboration between academic staff from the two faculties²³, the community of entrepreneurs, and the initiative of ECE Students to spread entrepreneurship across the Erasmus campus is “what ECE essentially consists of”, as one interviewee put it. Strategically, the central unit of co-ordination is the Board of Directors with ECE’s Managing Director and three academic directors from faculty together with a supervisory board including the two deans of ESE and RSM, as well as its Dean of Education.²⁴ This structure ensures that the academic education and research needs of the University faculties involved in ECE are appreciated with the centre focusing on offering extra-curricular EE activities. These ECE activities regularly also involve faculty staff (e.g., in the training weeks) allowing the faculties to market their education formats jointly with ECE.

Operationally, ECE’s management team and operative team (see 17.3.5 above) co-contributes to integrating the EE activities bringing the faculties and the centre together (e.g. hosting the introduction of the entrepreneurship master programme on the ECE Campus together with the association of master students or co-ordinating the demands of entrepreneurial business and academic study in the StEEP programme). Reportedly, entrepreneurship centres in the Netherlands are either organised as a university hub focusing on education and research or as a commercial centre (e.g., organised as an incubator for technology entrepreneurship), whereas ECE considers itself as a unit that is home to both university-led entrepreneurship education and research and a business-led community of entrepreneurs participating in and contributing to extra-curricular entrepreneurship training.

Managing the acquisition of resources

Similar to other government-funded initiatives to establish entrepreneurship at European higher education institutions, also the HOPE programme provided resources only for a certain period of time. Since the inception of the ECE, one of the prime objectives of the ECE management team was to financial sustainability by internal financing from its own operations and without money from the public part of the university. The initial establishment of the ECE in 2013 and 2014 was supported by external knock-on financing, in particular from the EU. This was with the idea to fund “growth activities” (as one interviewee put it) in entrepreneurship education to “stand on their own feet” later on. The team reached this goal: Today, ECE is fully self-sustaining in financial terms.

In a first step, financial sustainability has already been reached for the centre’s facility operations (renting offices to start-ups and young businesses and hosting events on the ECE Campus in the Rotterdam Science Tower). In a second step, ECE’s management aims to make the centre’s core education activities self-sustainable. The key element on this path is to offer training and consulting services along the complete entrepreneurial life cycle, i.e., also in the field of corporate entrepreneurship to SMEs and large enterprises (like the training and college weeks) in addition to start-up support (e.g., the

²³ RSM and ESE are the two largest schools respectively faculties of Erasmus University Rotterdam. While the two business and economics faculties with their entrepreneurship teaching and research staff have been instrumental in establishing the entrepreneurship centre in the first place, ECE intends to integrate more faculties of the university in the future.

²⁴ In addition, there is also an advisory board with members from business entrepreneurship and government.



Get Started programme). Overall, the management of ECE envisages that a broad portfolio of paid education in corporate entrepreneurship and start-up entrepreneurship offered to ECE's community of entrepreneurs will lead to a more stable entrepreneurship centre as compared to pure start-up centres. In fact, the community of SME owners, entrepreneurs, and business and innovation managers will play an important role in achieving self-sustainability by engaging community members as coaches and mentors²⁵ in education activities of ECE with the centre mainly providing the platform and bringing people together (e.g., student start-ups and experienced entrepreneurs).

17.4.2 Mindsets and attitudes

Raising awareness for the importance of entrepreneurship

From the point of view of the centre's management team, the ECE Student Association is most important in raising awareness for entrepreneurship as an activity (e.g., to solve societal problems through social entrepreneurship) and career option. The ECE Students' board organises different activities (<http://www.ecestudents.com/index.php/events>; <http://www.ecestudents.com/index.php/programs>). Some of these events and programmes are low-barrier activities to get students of the university interested in entrepreneurship in the first place while others encourage funding one's own venture and support in business planning, for example:

- A 24 hour business game where participants bring their entrepreneurial idea and develop a business model and plan in student teams supported by business consultants and the university's IT department (e.g., to prepare websites)
- SEM – a social entrepreneurship master class where students develop solutions for pressing social problems together with coaches and guest-lecturers
- European and global study trips to learn about the local start-up scenes of other places (e.g., to Berlin in 2015)
- Formats like Brain Busters, Clean Tech Challenges, and Idea Labs where students work on innovation projects, often in co-operation with other universities

Encouraging entrepreneurial behaviour

Overall, ECE Students is visible across the Erasmus University campuses providing a platform for social events and extra-curricular activities related to the entrepreneurship theme. And for the entrepreneurship centre, reportedly its focus on people (rather than on businesses and ventures as corporate organisations) make it easier to offer entrepreneurship formats at the University as an education institution. Erasmus students who come out of these extra-curricular activities with a definite motivation to setup their own business can then join the Get Started programme to further map out and implement their business idea (17.3.3). Disseminating initial curricular activities integrated in different bachelor degree programmes in the different faculties of the University, e.g., offering entrepreneurship minors to non-business/economics students is intended but entails the challenge of getting teaching personnel from these faculties on board.

²⁵ On a pro-bono basis or compensation below market rates.



17.5 Impact and lessons learned

17.5.1 Evaluating impacts of the entrepreneurship education approach

Overview of impact evaluation methods applied

Beyond the institutionalised accreditation of degree programmes (e.g., of the RSM entrepreneurship master by AACSB, AMBA, and EQUIS) and university-wide evaluation of course modules, the University and the ECE use several other tools and instruments to evaluate the impact. In the past the GUESSS – Global University Entrepreneurial Spirit Students' Survey and an own longitudinal entrepreneurship survey of Erasmus University students were used. Currently, ECE has four full professors and 35 researchers, conducting international academic research on entrepreneurship and business activities. Their research approach is very concrete and pragmatic, aiming to grow the economic development in the region, guiding policy officers and other ecosystem actors with practical recommendations.

The research at Erasmus Centre for Entrepreneurship mainly focuses on startups and scaleups. In the past few years, the focus has been shifted towards scale-ups. The outcomes of the research are published every year at the Top 250 Scale Up awards. Furthermore, the research has also led to the ScaleUp Monitor and Dashboard.²⁶ Most importantly, ECE's research insights offer practical solutions on how to recreate conducive conditions for companies to grow and impact on the local employability as well as economic growth.

17.5.2 Lessons learned

Summary of lessons learned from this case

Erasmus University Rotterdam is well established in both entrepreneurship education and research. The university and the Erasmus Centre for Entrepreneurship (ECE) offer complete entrepreneurship degree programmes and a differentiated portfolio of extra-curricular entrepreneurship training, coaching, and support across the whole spectrum of start-ups, SMEs and established corporations. What can be learned in particular from Erasmus University Rotterdam relates to these interlinked domains:

- Further developing an established entrepreneurial teaching profile and embedding entrepreneurial skills beyond the traditional business schools.
- Managing the sustainability and operational efficiency of an entrepreneurship centre together with a network of entrepreneurs participating in and contributing to entrepreneurship education in the entrepreneurship centre.

Given the first point, Erasmus University has been running bachelor modules and complete postgraduate entrepreneurship programmes and corresponding research activities for many years. The particular strength is clearly to teach and research entrepreneurship from both the management and economics angle with established master degrees and renowned research tracks in entrepreneurial management and business innovation as well as in the economics of entrepreneurship. Since 2015, Erasmus University Rotterdam has embedded entrepreneurial courses at several schools. Rotterdam School of Management is the main school in which these activities

²⁶ See <https://ece.nl/scaleup-research/>.



take place. In the past few years, ECE has dedicated its time and other resources not only to train students, but also teachers to become more entrepreneurial and innovative. Offering teachers and other staff members workshops and courses on entrepreneurial competencies aligns with the life-long-learning ambitions of both teachers and the university.).

Actively leading change in one's educational profile provides opportunities for tapping new or expanding target groups, in this case established entrepreneurs, SME owners, and corporate intrapreneurial managers in addition to traditional nascent entrepreneurs and start-up founders. Taking these new target groups on board allows maintaining a master programme focused on entrepreneurship over time within a competitive portfolio of postgraduate education. While particularly insightful in the context of business schools with funding based on tuition fees, expanding entrepreneurship teaching portfolios towards SMEs and corporate entrepreneurship in established firms may also be an interesting strategy generally. This may be especially true in times of declining government funding for regular higher education and corresponding needs to market degree programmes with economically viable tuition fees across different target groups. And students seeking first-time start-up education and training can still be catered for, e.g., through a master programme blending corporate entrepreneurship and new business venturing education as well as start-up support in cooperation with an entrepreneurship centre as is the case at Rotterdam. The broadened mix of target groups also benefits the entrepreneurial community around the ECE overall, with experienced entrepreneurs and business managers supporting and coaching junior start-up entrepreneurs (e.g., from the university).

Considering the second point, the establishment and operation of the ECE is instructive in many ways, in particular regarding its positioning within the University, its path towards financial independence, and the management team's approach towards running the centre. As discussed in 17.4, at the centre's heart is the education and research input from the university's schools of management and economics, the engagement of ECE students in entrepreneurship activities, and the community of businesspeople and entrepreneurs as members of the centre. The centre benefits from Erasmus University's strong market recognition in management and economics education. At the same time, the centre provides a platform for university faculties to market their research knowledge and education expertise through ECE's training, workshop, and programme formats (e.g., entrepreneurship boot camps, training weeks, or master classes) under the roof of one university-wide entrepreneurship brand.

The centre was started on the basis of utilising public funding in the beginning. Yet today the centre is run so that it becomes more and more self-sustainable over time by generating cash flows through its education products, services, and facilities (see 17.4.1) offered to its expanded corporate target groups in addition to supporting start-up entrepreneurship. Moreover, teaching and coaching formats have a scalable and flexible structure within the centre. For example, in its Get Started programme (see 17.3.3) ECE offers start-up coaching and support for individual start-up entrepreneurs (students, alumni, university staff) similar to other entrepreneurship centres. However, the Get Started programme has a staged structure and coaching format allowing entrepreneurs to take part in the programme individually all around the year and learn from each other as a group and from experienced entrepreneurs serving as coaches. This structure allows ECE to scale start-up support and run the programme with decreasing dependence on the centre's own personnel resources.



Generally, also the other extra-curricular entrepreneurship training and teaching formats of ECE are designed to be highly instructive by involving entrepreneurs and entrepreneurial managers (together with university experts) to coach and train other entrepreneurs and business managers. Both the **scalable structure of extra-curricular activities** and **the integration of the community of entrepreneurs contribute to operating the centre in a resource-efficient way** and integrating real entrepreneurs or other entrepreneurship practitioners (e.g., start-up consultants and corporate intrapreneurs) in education; both scalability and integration are important for running entrepreneurship centres in higher education in general.

Transferability to other universities

First of all, for other higher education institutions aiming to build complete postgraduate education programmes in entrepreneurship the case of Erasmus University's degrees in *Strategic Entrepreneurship* (at the Rotterdam School of Management), *Entrepreneurship and Strategy Economics* (at the Erasmus School of Economics), and *Cultural Economics and Entrepreneurship* (at the Erasmus School of History, Culture and Communication) will be inspiring as regards their structure and focus. This is in particular in view of the above lesson learned for positioning a programme (the new Strategic Entrepreneurship master) for the future with corresponding target groups and teaching contents. Since comprehensive education offerings in the economics of entrepreneurship are rare (adjacent to widespread entrepreneurial management formats in higher education across Europe), Erasmus University is an interesting benchmark and blueprint for those universities with strong economics faculty teams. Clearly, the University and Erasmus School of Economics in particular have built a strong base of faculty staff in entrepreneurial economics (and management) over many years. Still, however, taking on board selected education and training activities or cooperating in the field with Erasmus University may well be a workable path for growing the economics strand of entrepreneurship in one's business and economics departments at home.

In addition to the entrepreneurship education efforts of the Schools of Management and Economics, also the Erasmus Centre of Entrepreneurship constitutes a very interesting blueprint. This is especially in the case of the ECE's humanistic mission to empower entrepreneurs and its management perspective to build an entrepreneurship centre to stand on its own feet based on its own education and training offerings in collaboration with the same community of entrepreneurial people it envisions in the above mission. In this respect, ECE's approach to extensively integrate its member community of entrepreneurs in its teaching offers by engaging them as coaches and instructors is a meaningful way forward. This may be an option in particular for those entrepreneurship centres at European universities which would like to expand their entrepreneurship education and start-up coaching offers from a limited base of their own university staff. Regarding specific education activities to achieve this integration of a community of entrepreneurs into entrepreneurship teaching, ECE has designed activities that can be scaled and coordinated efficiently such as the Get Started programme for nascent entrepreneurs or the New Business Cycle programme for SME Entrepreneurs. Both programmes involve experienced entrepreneurs in instructor roles and teach other entrepreneurs in the ECE community. For this it is essential to keep the wheels in motion within a vibrant network of entrepreneurial people at the heart of the centre. Towards this end, ECE has set-up events and network structures such as Day@theCampus and other specific meeting and training activities that are valuable to study and transfer to one's own education institution.



References

Research for the original case study in 2015 was conducted by Marc Grünhagen, Researcher and Lecturer in Entrepreneurship, Schumpeter School of Business and Economics, University of Wuppertal, Germany, on behalf of the study for supporting the entrepreneurial potential of higher education (sepHE). Farshida Zafar, Director of the Erasmus Centre for Entrepreneurship, updated information in 2022; Stefan Lilischkis from empirica edited the updates. Sources and references used include desk research plus the following:

Interviews

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