



NEW ENGINEERS

DEVELOPMENT

ENTERPRISING ENGINEERS
WITH A CREATIVE MINDSET



NEW ENGINEERS

DEVELOPMENT

New Engineers

FOR ENGINEERS DARING
TO BE CHALLENGED,
WILLING TO CHANGE.

WE ARE LOOKING FOR
GAME CHANGERS THAT
MAKE **MEANINGFUL**
CONTRIBUTIONS USING
THEIR IMAGINATION,
CURIOSITY AND DRIVE.

DO YOU DARE?

Technology is the shaping force of the 21st century.

But technology in itself is nothing.

It needs soul. It needs vision, creativity and leadership. To shape it New Engineers are needed

New Engineers? Why?! We are educating the 21st century engineers with a 20th century curriculum at 19th century institutions.

New Engineers is changing all that. At New Engineers we study, work, learn, develop together. A new study dedicated to the development of new engineers for the 21st century.

New Engineers is focused on engineering for the industry. It is real world education.

You will be challenged to use all your abilities and imagination to come up with new ways of designing products and services. Your leadership and followership will be developed through real world assignments for team of which you are a member.

5 CORE DISCIPLINES DRIVING THE PROGRAM

The laws of Moore and Metcalf describe growing computing power and bandwidth allowing distributed, intelligent applications.

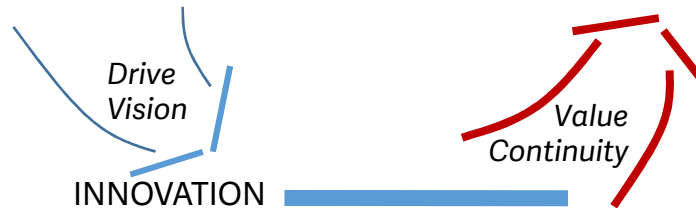
LEADERSHIP

Change requires leadership. You can only lead others if you can lead yourself. And that starts with knowing yourself, setting your own vision and driving yourself. Only then you can start shaping a vision with others, engaging them and forming a group of people that achieves the organizations' goals.

BUSINESS DEVELOPMENT

Ultimately a business is about its continued ability to deliver value to its customers, society, its employees and shareholders. Key is its capability to adopt to and use the changing and growingly complex business and technological environment. Defining the purpose of the organization and aligning all resources accordingly is the work of the strategist. It drives the change and the deployment of resources.

Meeting the faster changing market demands and technology requires an agile organization designed for speeds and adaptability without losing its focus.



INNOVATION

The development of new ideas, more effective processes and/or products to meet existing and new needs drives every organization. It is based on a deep understanding of both market and customers on the one hand, and science and technology on the other.

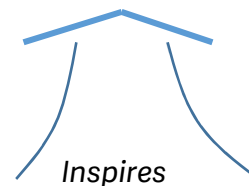
CHANGE MANAGEMENT

Having a vision is one thing, bringing others along is another. Knowing what makes people tick, what their underlying values are is necessary to form a coherent, focussed and performing group of people that can execute your vision.

Enables

Enables

Networking across disciplines




TECHNOLOGY

Science and technology are advancing in fascinating and complex ways. You will need deep knowledge of some core developments in order to be able to assess the impact and use for your customers, your products and your organization.

Growing complexity requires ever closer cooperation across the value chain by suppliers, customers and even competitors.

WHAT WE STAND FOR | NEW ENGINEERS AND ITS STUDENTS ARE SHAMELESSLY **AMBITIOUS** AND **COMMITTED** TO DISCOVERING NEW WAYS OF CREATING PRODUCTS AND SERVICES, IN WAYS THAT **SERVE** THE COMPANIES WE WORK FOR AND THE **COMMUNITY** WE ARE A PART OF. WE HAVE A **JOYFUL** WAY OF LOOKING AT THE WORLD, AND **TECHNOLOGY** IN PARTICULAR. **CURIOUS** AND **DRIVEN** WE **EXPLORE** THE POSSIBILITIES IT OFFERS AND **SHARE** THOSE GENEROUSLY WITH THE PEOPLE AROUND US.



Our vision on education Teach me all you know - I'll teach you all I know

We learn as we work, by asking questions and setting challenges
We investigate, and learn by creating and testing new products and services

Our promise to students |

An intense educational experience
New way you look at yourself and the company you work in
Dedicated staff that will challenge you and itself
An inspiring and challenging environment
Propel your career

Our promise to companies |

Dedicated students and staff that are open to your needs
Knowledge and insights to share with you and your staff
An impulse for change

What we ask of students |

Be open and curious
Look beyond the obvious and do not accept 'impossible'
Have a strong sense of dedication and discipline
Push yourself through critical self-reflection
Enjoy technology and learning

What we ask of companies |

Offer our students a challenging position
Share with them and us what you know
Be open and make learning possible
Participate actively in our school

5 Skills & 5 attitudes | We focus on developing 5 key skills & attitudes towards a game changer career.

Learning
Enterprising
Leading
Creating
Communicating

Boundless
Curious
Disciplined
Eager
Social



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Teaching Red threads

Deep knowledge of technology |

Technology enables a lot of things. Technology is a lot of things from robotics to big data, from mechatronics to energy, and so much more. Whatever we focus on we need to have a deep and thorough understanding before we can use the power of technology.

You, the company, the market |

We focus on technology in the context of the companies we work for, and customers it serves. Your role is to shape the relation between technology, the market and the company.

Game changer |

To serve well you'll need to have a strong character that knows how to lead as well as how to follow, how to bring people together and make them work smoothly together, how to play a whole new game.

Growing complexity |

Technology and business become evermore complex, growing exponentially. The challenge for all of us is to make use of all the possibilities without being overwhelmed. Complexity is also social. Social and cultural awareness is a key factor in making change happen.

Innovation & integration |

Innovation happens mostly across disciplines, across economic domains, across networks. So innovating is a matter of integrating as well.

Agility & adaptiveness |

The faster things grow, the more complex they are the more business need to be agile and adaptive. These are things that do not just happen. You need to organize for them.

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Teaching Our approach

Students own their learning process |

New Engineers are the owners of their learning process. Through critical self-reflection and strong internal drive they push themselves to the limit and beyond. You determine, supported by us, what knowledge and expertise you need. You share your experience with others and contribute to the learning and development of all.

Staff |

The staff consists experts and teacher-coaches. International experts contribute specific knowledge. Teacher-coaches are experts in their own domain and are there to support the students in their learning process integrating all domains and applying it. Student are actively involved as peer coaches and organizers.

Theory & practice |

The curriculum provides deep theoretical material that takes you to the actual forefront of knowledge in your field. You apply what you've learned developing products and services, new business segments, creating alliances with suppliers and customers – real, live cases.

Individual & social |

You work and study together with other students, colleagues, teachers inside and outside your network. Teaching is developed to specifically address the learning process in individual, small group and large group settings.

Learning in motion |

Sports is an integral part of learning. It makes you stronger and will teach you about yourself and your interaction with others..

Reflection |

You develop best when critically and constructively reflecting on your actions. We support you questioning yourself and your fellow students on the situation in which you work and learn.

	WK 1	WK 2	WK 3	WK 4	WK 5	WK 6	WK 7	WK 8
TECHNOLOGY		<u>Technology I & II</u> Latest in technological developments & Analysis	<u>Technology II Analysis</u>	<u>Technology III Specialization</u>	<u>Technology III Specialization</u>		<u>Technology III Specialization</u>	
BUSINESS DEV	<u>Business development I</u> Knowing the business					<u>Business development II</u> Business models		
LEADERSHIP	<u>Personal leadership I & II</u> Knowing yourself & Learning to learn			<u>Inter-disciplinary leadership I</u> Session design & decision-making		<u>Creativity I</u> Leading for creativity	<u>Personal leadership III</u> Effective leadership	
CHANGE			<u>Change I</u> Product and process innovation		<u>Change II</u> Project management with Scrum		<u>Change III</u> Psychology of change	
INNOVATION				<u>Innovation I</u> Design Thinking	<u>Innovation II</u> From customer to design	<u>Social development II</u> – Cultural awareness		

Bringing it all together

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YOU

Study

Prepare

Peer learning

Study

Reflect

The
Company

Observe

Participate

Collect information

Decide

Experiment

Mentoring

Discuss

New
Engineers

Discuss

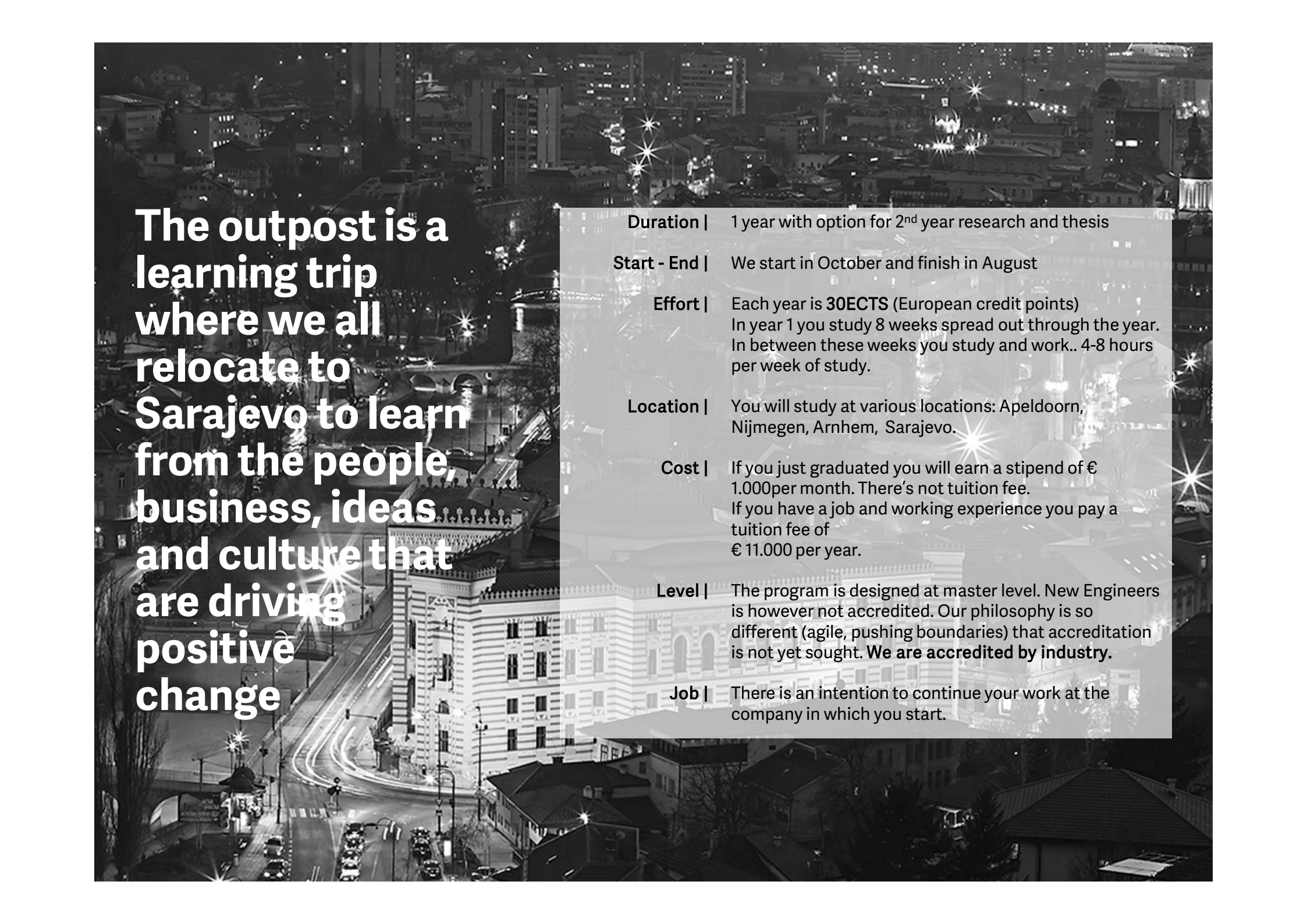
Learn

Investigate

Prepare

Review

Group work



The outpost is a learning trip where we all relocate to Sarajevo to learn from the people, business, ideas and culture that are driving positive change

Duration | 1 year with option for 2nd year research and thesis

Start - End | We start in October and finish in August

Effort | Each year is **30ECTS** (European credit points)
In year 1 you study 8 weeks spread out through the year.
In between these weeks you study and work.. 4-8 hours per week of study.

Location | You will study at various locations: Apeldoorn, Nijmegen, Arnhem, Sarajevo.

Cost | If you just graduated you will earn a stipend of € 1.000per month. There's not tuition fee.
If you have a job and working experience you pay a tuition fee of € 11.000 per year.

Level | The program is designed at master level. New Engineers is however not accredited. Our philosophy is so different (agile, pushing boundaries) that accreditation is not yet sought. **We are accredited by industry.**

Job | There is an intention to continue your work at the company in which you start.



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