

- The Winter School is a joint activity of Ruhr Master School, ruhrvalley, DAAD EuroPIM and InduTwin Bachelor Program.
冬令营由鲁尔硕士学院、鲁尔谷、多特蒙德应用技术大学欧洲项目管理硕士和工科双学位学士项目联合举办。
- The workshop takes place in **Dortmund, Nov 23 – 27, 2020**
冬令营于2020年11月23日至27日在多特蒙德举办。
- The participation is free of any fees.
参加冬令营的课程不收取费用。
- Certificates are provided to successful participants for every stream.
成功参加每一门课程都可以获得该门课程的证书。
- Workshop registration is required until Nov 1st 2020.
课程报名截止日期：2020年11月1日

Stream H: Lean Six Sigma

- Organizer: Stephan Weyers (stephan.weyers@fh-dortmund.de)
主讲教授: Stefan Weyers
- Target Group: Mechanical Engineering, International Business, Logistics
目标群体: 机械工程、国际商务和物流专业的学生
- Short Description: Introduction to selective Lean / Six Sigma tools and concepts. The stream includes self-study of elearning material in preparation for the course, daily online-lectures and exercises in small break-out groups as well as self-managed intercultural virtual team work on a student project in-between lectures throughout the week.
课程简介: 介绍精益/六西格玛的工具和概念。该课程包括在线自学为课程做准备, 每天的在线讲座和分组讨论练习, 以及课程期间学生在国际项目中自我管理的跨文化虚拟团队协作。
- Available Seats for Zhengzhou University of Light Industry: 7
为郑州轻工业大学提供参加名额: 7名

Stream H: Lean Six Sigma

Time*	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00	Lecture: Introduction to Six Sigma	Presentation: Student Project Define Phase	Presentation: Student Project Measure Phase	Presentation: Student Project Analyze Phase	Presentation: Student Project Improve Phase
09:00-10:00	Lecture: Introduction to Six Sigma	Lecture: Measure Phase	Lecture: Analyze Phase	Lecture: Improve Phase	Lecture: Lean Tools and Concepts
10:00-11:00	Lecture: Define Phase	Lecture: Measure Phase	Lecture: Analyze Phase	Lecture: Improve Phase	Lecture: Lean Tools and Concepts
11:00-12:00	Lecture: Define Phase	Lecture: Basic Statistics	Lecture: Analyze Phase	Lecture: Improve Phase	Lecture: Control Phase
12:00-13:00	Break-Out: Student Project Define Phase	Break-Out: Student Project Measure Phase	Break-Out: Student Project Analyze Phase	Break-Out: Student Project Improve Phase	Lecture: Control Phase
2-3 hours self organized	Student Project Define Phase	Student Project Measure Phase	Student Project Analyze Phase	Student Project Improve Phase	* Local time in Germany

课程H: 精益六西格玛 (Lean Six Sigma)

时间*	周一	周二	周三	周四	周五
15:00-16:00	课程: 六西格玛导论	展示: 学生项目 定义阶段	展示: 学生项目 测量阶段	展示: 学生项目 分析阶段	展示: 学生项目 改进阶段
16:00-17:00	课程: 六西格玛导论	课程: 测量阶段	课程: 分析阶段	课程: 改进阶段	课程: 精益工具和概念
17:00-18:00	课程: 定义阶段	课程: 测量阶段	课程: 分析阶段	课程: 改进阶段	课程: 精益工具和概念
18:00-19:00	课程: 定义阶段	课程: 基本统计	课程: 分析阶段	课程: 改进阶段	课程: 控制阶段
19:00-20:00	分组任务: 学生项目 定义阶段	分组任务: 学生项目 测量阶段	分组任务: 学生项目 分析阶段	分组任务: 学生项目 改进阶段	课程: 控制阶段
2-3 小时的 自学时间	学生项目 定义阶段	学生项目 测量阶段	学生项目 分析阶段	学生项目 改进阶段	* 北京时间

Stream I: Business Design for Engineers

- Organizer: Kay Suwelack (kay.suwelack@fh-dortmund.de)
主讲教授: Kay Suwelack
- Target Group: Mechanical Engineering, International Business, Computer Science
目标群体: 机械工程、国际商务和计算机专业学生
- Short Description: This project seminar contains an introduction to the working method "Business Design", which is developed on the basis of six guiding principles and prepared for the use in innovation projects by means of methods and tools. The imparted approach is intended to serve as an inspiration for the design of innovation projects and can/should be adapted to individual needs depending on the project focus. The course imparts methodological and professional skills from the fields of design thinking, lean start-up, product and project management. The goal is to apply these skills in a context of high uncertainty in the field of digitization and Industry 4.0 and to systematically and iteratively eliminate these uncertainties in the development of business and product ideas.

课程简介: 该课程包含“商业设计”工作方法的介绍, 该方法是在六项指导原则的基础上发展起来的, 并通过方法和工具为其在创新项目中的应用做准备。所传授的方法旨在为创新项目的设计提供灵感, 并可根据项目的重点适应个人需求。该课程传授设计思维、精益创业、产品和项目管理领域的方法和专业技能。目标是在数字化和工业4.0领域高度不确定性的背景下应用这些技能, 并在商业和产品理念的开发中系统地、反复地消除这些不确定性。

- Available Seats for Zhengzhou University of Light Industry: 5
为郑州轻工业大学提供参加名额: 5名

Stream I: Business Design for Engineers

Time	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00	Online-Lecture Introduction to the Business Design Process	Student presentation Presenting business ideas and decision	Student presentation Presenting business models, DNA and videos	Student presentation Presenting results from market feedback	Student presentation Presenting prototypes
09:00-10:00	Break-Out Spaghetti-Challenge (or similar)	Online-Lecture Business Model CANVAS + Business DNA		Online-Lecture Lean Offerings CANVAS	Online-Lecture Action Plan CANVAS
10:00-11:00	Online-Lecture Structured business idea development (plus inspiration and creativity tools)	Break-Out Developing a business model	Online-Lecture Hypothesizes & experiments CANVAS	Online-Lecture Prototyping and tools	Break-Out Developing a first action plan
11:00-12:00			Break-Out Developing hypothesizes and experiments	Break-Out Developing lean offerings and prototype ideas	
12:00-13:00	Break-Out Developing first business ideas	Online-Lecture Video stage CANVAS and realization tools			Online-Lecture Wrap-up and next steps
2-3 hours self organized	Student Project Sharpen at least 3 potential business ideas and choose	Student Project Create a 60s video about your business DNA	Student Project Validate hypothesizes by experiments	Student Project Build a first prototype	* Local time in Germany

课程 I: 工程师的商业设计

时间	周一	周二	周三	周四	周五
15:00-16:00	在线课程: 商业设计流程简介	学生展示: 展示商业理念与决策	学生展示: 展示商业模式, 商业DNA 和视频	学生展示: 展示市场反馈的结果	学生展示: 展示原型
16:00-17:00	分组任务: 意大利面挑战	在线课程: 商业模式 CANVAS + Business DNA		在线课程: 精益产品CANVAS	在线课程: 行动计划CANVAS
17:00-18:00	在线课程: 结构化的商业理念发展 (加灵感和创意工具)。	分组任务: 制定商业模式	在线课程: 假设和实验 CANVAS	在线课程: 原型设计与工具	分组任务: 制定第一个行动计划
18:00-19:00			分组任务: 提出假设和实验	分组任务: 开发精益产品和原型设计创意	
19:00-20:00	分组任务: 开发商业想法	在线课程: 视频CANVAS和实现工具			在线课程: 总结和下一步计划
2-3 小时的 自学时间	学生项目: 锐化至少3个潜在的商业想法, 并进行选择	学生项目: 制作60秒视频展示其商业DNA	学生项目: 通过实验验证假设	学生项目: 建立第一个原型	* 北京时间