







Joint European Summer School on Fuel Cell, Electrolyser, and Battery Technologies JESS 2017

Innovative Technology **Business Development**

18 – 22 September 2017 Hotel Amarilia, Vouliagmeni, Athens, Greece



sponsored and supported by















The **2nd week** of the Joint European Summer School JESS 2017 brings high quality graduate level courses on selected topics of vehicle technology, innovation & business development, safe handling of hydrogen, and modelling. This series of summer schools has been ongoing since 2004 and targets an audience of **university students (MSc and PhD levels)** and **post-doctoral researchers**. We also welcome **more experienced researchers and engineers** wishing to expand their general knowledge, for instance, to suit a newly acquired position or collect credits for Continuous Professional Development (CPD). The course content is tailored to the needs of a diverse audience: newcomers to the field, experienced students, and young professionals working at the forefront of fuel cell and hydrogen applications.

The courses are accredited at the University of Birmingham and each carry 3 ECTS points.

The previous week (Week 1) will offer three introductory courses to high and low temperature fuel cells and electrolysers, and battery technology (please refer to the separate programme). The two weeks are conducted independently of each other and students can choose the courses most appropriate to their studies.

The Innovative Technology Business Development module

offers a combination of theory and practical exercises. From how to discover a viable business idea to how to find the required investment capital for different stages of growth. The course is delivered in five interconnected classes:

- 1) **Ideation / Creativity Class**. Here the student will learn how to explore and find own their own business idea. The class will also introduce the Design Thinking approach in building early stage product prototypes.
- 2) **Innovation Management Class**. This will discuss how the Business Canvas concept can help to articulate a viable business. This will help the student to clarify the problem address and the targeted customer segments. This class will offer the opportunity to build your own business canvas and test your own idea.
- 3) **Early Stage Finance Class**. At this stage, the student will explore and discuss the alternative financial tools available to early stage companies to raise capital. This will include a review of the latest developments in alternative finance field including the opportunity to design your own crowdfunding campaign for your business idea discussed in the previous two classes.
- 4) **Growth Finance Class**. This will bring a very useful introduction into the available financial mechanisms used by large companies to grow. From raising money through IPOs, to the use of debt, equity and hybrid financing techniques to achieve business expansion in a cost-effective manner. This class will help students to identify the optimal financing solution for a growth company.
- 5) **Business Development and Intellectual Property Class**. Looking into how to spin out a company, for example from university, protect the intellectual property, and cope with the formal challenges of running a business.

The Business Development module draws on the knowledge and expertise of a carefully selected group of lecturers currently working at the leading edge of research and development in Europe and associated to universities, national research centres, and industry:

Emma Vartolomei AllStreet, London, UK

Silash Ruparell independent consultant, London, UK

Dr Birgit Thoben consultant business science art, Stuttgart, Germany

Dr James Wilkie University of Birmingham, UK

You can find brief CV's of the lecturers, programme updates, and information on past events on the JESS web site: http://www.jess-summerschool.eu/JESS-2017 as well as the general brochures for JESS 2017.

JESS 2017		Innovative Technology Business Development P plenary lectures (all students), St student presentations,	tentative programme last changed 26/03/17
Sunday	17/09/2017	BD specialised lectures	
	20:30	welcome dinner	
Monday	18/09/2017		
P.01	08:30 09:00	Welcome and General Introduction Sustainable and Renewable Energy Future	Robert Steinberger-Wilckens (U Bham) Robert Steinberger-Wilckens (U Bham)
P.02	09:45 10:00	coffee break Introduction to Fuel Cell Vehicles & Markets	Ferdinand Panik (U Esslingen)
P.03	11:15 11:30 13:00	break Introduction to Hydrogen Safety lunch	Vladimir Molkov (Ulster University)
BD.01	16:00	Design Thinking, Creativity & Ideation	Birgit Thoben (Bosch)
	17:30	coffee break	
P.04 P.05	18:00 19:30	Safety when working on FCV's Introduction to the Students' Project	Vincent Mattelaer (Toyota Europe) Robert Steinberger-Wilckens (U Bham)
P.05	19:45	welcome reception (bar)	Robert Steinberger-wilckens (O Briam)
	20:15	dinner	
St.01	21:15	Students' Presentations I	students
Tuesday	19/09/2017		
BD.02	08:30	Design Thinking, Creativity & Ideation pt. 2 coffee break	Birgit Thoben (Bosch)
BD.03	09:45 10:00	Business CANVAS Theory	Birgit Thoben (Bosch)
	11:15	break	
BD.04	11:30 13:00	Business CANVAS Exercise lunch	Birgit Thoben (Bosch)
BD.05	16:00 17:15	Alternative Financial Tools coffee break	Emma Vartolomei (AllStreet)
P.06	17:15	Developing Fuel Cell Businesses	James Wilkie (U Bham)
	18:15	break	
St.02	18:30 20:00	Students' Presentations II dinner	students
Wednesday	20/09/2017		
P.07	08:30 09:45	Mirai product knowledge coffee break	Mirai product knowledge
BD.06	10:00	Introduction to Business Development	James Wilkie (U Bham)
BD.07	11:15 11:30	break Patents and Copyrights	James Wilkie (U Bham)
DD.01	13:00	lunch	valles white (o bhall)
E	15:00 21:00	excursion dinner	
Thursday	21/09/2017		
BD.08	08:30	Alternative Financial Tools Exercise	Emma Vartolomei (AllStreet)
BD.09	09:45 10:00	coffee break Designing Crowd Funding Campaigns	Emma Vartolomei (AllStreet)
	11:15	break	
BD.10	11:30 13:00	Designing Crowd Funding Exercise lunch	Emma Vartolomei (AllStreet)
BD.11	16:00	Introduction to Financial Mechanisms	Silash Ruparell
	17:00	coffee break	· ·
BD.12	17:15 18:30	Growth Finance break	Silash Ruparell
St.03	18:45 20:00	dinner	students
Friday	22/09/2017		
BD.13	08:30	Raising Money	Silash Ruparell
	09:45	coffee break	·
BD.14	10:00 11:15	Finance Exercise break	Silash Ruparell
St.04	11:15	Student project time	students
-	13:00	lunch	
St.05	16:00	ECTS Exam (optional)	
St.06	17:00 17:15	coffee break Students' Project Presentations	Robert Steinberger-Wilckens (U Bham)
500	18:45	break	The state of the s
P.08	19:00	Farewell	Robert Steinberger-Wilckens (U Bham)
	20:30	gala dinner	

Joint European Summer School on Fuel Cell, Electrolyser, and Battery Technologies – Registration Form

Fuel Cells Electric Vehicles	
Innovative Technology Business Development	
Hydrogen Safety	
The Modelling Master Class	
Hotel Amarila (http://www.amarilia.gr)	

Hotel Amarila (http://www.amarilia.gr)
17 – 23 September 2017, Vouliagmeni (Athens), Greece

Deadline for registration: 31 August 2017

Title				
First name				
Last name				
Gender	Male □ Female □			
University/Institution/Company Name				
Street / P.O. Box				
Postal code				
Town/City				
Country				
V.A.T. number (if applicable)				
Phone				
E-mail:				
Athens arrival date and time (optional)				
Athens departure date and time				
Please note any special dietary re-				
quirements, disabilities etc. that we may				
need to know about				
standard rate (all rates incl. Greek VAT)	The registration fee covers tuition fees, accommodation for six nights, full board (meals and coffee breaks), the drinks reception, end-ofweek banquet, and the excursion.			
☐ single room 1.340 €				
☐ double room 1.150 € per person				
Shared with:				
□ accompanying person (no lectures, shared room) 550 €, name:				
Place & date	Signature			

PLEASE RETURN BY E-MAIL OR FAX TO

Mrs Manuela Drape-Stathoglou manuela@panhellas.gr, Fax: +30 2810 300848

Or follow the registration link on the Summer School web site

http://www.jess-summerschool.eu/JESS-2017

You will then receive a confirmation and an invoice for the registration fee.