

1	Module Name	Project Work on Transferring Technologies to Industry , Tutorial at the joint EMRS-EUROMAT materials weekend 20.09.2015 in Warsaw, Poland <i>Sponsored by HSSTCM (the Hellenic Society for Science and Technology of Condensed Matter)</i>	5 ECTS
2	Talks	A "Effective Technology Transfer: from the Invention to the Innovation", 30 min B "Technology commercialisation routes: licensing out vs joint venture vs start-up, 30 min C "Unravelling the Gordian Knot: strategies for successful technological entrepreneurship", 30 min D "4 successes and a failure: Case studies in technology transfer", 30 min E 12 Case studies of commercialisation of a new material or system, to be prepared by students before hand, and presented over 5 minutes, concluding with "Lessons Learned", total 60 mins	3 ECTS
		F EMRS Fall meeting 2015 or EUROMAT 2015 conference	2 ECTS
3	Teaching Staff	A-E Dr. George Vekinis, Institute of Nanoscience and Nanotechnology, NCSR "Demokritos", GR, g.vekinis@inn.demokritos.gr F Module Coordinators	
4	Module Coordinators	Dr. George Vekinis, Institute of Nanoscience and Nanotechnology, NCSR "Demokritos", GR, g.vekinis@inn.demokritos.gr Prof. A. Lindsay Greer, Department of Materials Science & Metallurgy, University of Cambridge, UK, alg13@cam.ac.uk Prof. Peter J. Wellmann, Materials Department, University of Erlangen-Nürnberg, D, peter.wellmann@fau.de	
4	Syllabus Outline	1) "Effective Technology Transfer: from the Invention to the Innovation". A brief introduction to the TT process and discussion of methodological and strategic aspects: Evaluation, valorisation, networking, feasibility vs viability, decision-making strategies, milestones, commercialisation routes, business planning etc. 2) "Technology commercialisation routes: licensing out vs joint venture vs start-up". Brief introduction the main routes to commercialisation and discussion of their comparative pros and cons for each type of technology. 3) "Unravelling the Gordian Knot: strategies for successful technological entrepreneurship". Dos and don'ts for successful technological entrepreneurship for those thinking of setting-up a start-up (or spin-off) company for their technology. 4) "4 successes and a failure: Case studies in technology transfer". Presentation of a number of technological TT stories aimed at illustrating the procedures, problems and challenges met in every case.	

6	Educational goals and Learning outcome	<ul style="list-style-type: none"> • Specific skills: Gain a broad understanding of the formal processes involved in transferring a technology to industry • Soft skills: Ability to research, analyse and present a case study and to carry out a scientific discussion. • For all skills: Can explain, apply and reflect upon the theories, technologies, specialties, terminology, boundaries and different schools of their discipline (field of gained knowledge) critically and in depth.
7	Prerequisites	Bachelor degree in Chemistry, Molecular Science, Physics, Nanotechnology, Materials Science or a related course
8	Intended stage in the degree course	Elective module during Master or Graduate Studies (interdisciplinary studies, soft skill training)
9	Courses of study for which the module is acceptable	M.Sc. and PhD-studies in Chemistry, Molecular Science, Physics , Nanotechnology, Materials Science or a related course
10	Assessment and examinations	<ul style="list-style-type: none"> • Oral examination during poster session (15 min) • notes from attended conference (8 pages)
11	Calculation of the grade for the module	100% from oral examination (passed or failed)
12	Frequency of offer	Single event, September 19 th + 20 th , 2015 + associated conference week
13	Workload	<ul style="list-style-type: none"> • Home studies (preparation of poster presentation): 90 h • Tutorial day (lectures + poster session): 4 h • Conference attendance (EMRS fall meeting or EUROMAT 2015 conference, September 2015 in Warsaw, Poland): 56 h
14	Duration	1 semester / term
15	Language	English
16	Optional Preparatory reading	<p>"Technology transfer in practice: from Invention to Innovation" 2014, George Vekinis (http://www.amazon.co.uk/Technology-Transfer-practice-step-step/dp/9609358551) .</p> <p>"The Researcher Entrepreneur", (to be published Summer 2015), George Vekinis</p>

Module Catalogue (to be completed by home University / College):

.....

.....