

Positioning for Future Job Market Opportunities



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This Master Course is in tune with actual professional requirements. It responds to a major shift of the professional mainstream away from the traditional core competences of design and build. Civil engineers, economists, lawyers, and others increasingly take over former architect's work load. New technologies create a paradigm change towards establishing new job profiles thus creating new employment opportunities.

Conventional competences transform into border competences such as life support systems, mechatronics, ICT and microsystem technology, embedded ambience (environments), sustainable energy design and engineering, real time controlling, innovation management, facility transformation management, etc. To achieve this, the course expands into disciplines such as economy, management, mechanical and electrical engineering, computer science, sociology, and medicine by synchronizing these fields with innovative ambient and construction technology. Future graduates from this course will be trained for cross disciplinary thinking and acting and therefore will be very flexible to adjust to changing professional environments.

Graduates of the Master in Advanced Construction and Building Technology may choose from a wide range of promising professional activities, such as:

- Research and development in larger companies:

1. Design, development, and optimization of building systems and components
 2. Innovative materials, advanced logistics, supply chain management, IT and robotics
 3. HVAC systems, industrialized production
 4. Daily life support systems, intelligent buildings, smart homes
- Facility and building management:
 1. Aging society, home care, life support systems
 2. Ambient assisted living, embedded systems, ubiquitous computing
 3. Microsystems technology, microelectronics, mechatronics
 - Marketing research and oriented universal design
 - Housing industry:
 1. Development, consulting
 2. Mass customization, automated production of building systems, construction machinery equipment
 3. Project management and engineering
 - Government agencies
 - Decentralized energy harvesting
 - Sustainable concepts for extreme environments like desert, tundra, arctic, ocean
 - Investment firms, space construction, space habitat
 - Academic careers

Any larger corporation which is technology and innovation driven can survive as a global player, designing, engineering, producing, and servicing its core business 24/7 around the globe. Here our global course network and our 10 years of international experience in Europe, Asia, and America permeates into course work, well equipping our graduates for a promising global and intercultural career.