

Course Unit Title	AQSE 430 Evaluating Sustainable Development
Programme of study	BSc in Quantity Surveying
Lecturer	Dr.-Ing. Paris A. Fokaides
Type of course unit	Technical Elective
ECTS	5
Year of study:	4
Semester(s) offered	Spring Semester 2014
Course content	<ul style="list-style-type: none"> ▪ Sustainability aspects in the built environment ▪ Sustainable building materials and energy technologies for the built environment ▪ Whole life costing concept in the built environment ▪ Sustainability schemes for eco-friendly buildings
Course modules:	<p><u>Module 1: Introduction</u></p> <ul style="list-style-type: none"> ▪ Definition of sustainability ▪ Sustainable development principles <p><u>Module 2: Sustainable building materials</u></p> <ul style="list-style-type: none"> ▪ Sustainable building materials properties ▪ Use of sustainable building materials in renovation projects ▪ Sustainability schemes evaluation of building materials ▪ Life cycle assessment of building materials <p><u>Module 3: Sustainable energy for the built environment</u></p> <ul style="list-style-type: none"> ▪ Basic principles of renewable energy technologies ▪ Integration of renewable energy technologies in the built environment ▪ Renewable energy technologies in renovation projects <p><u>Module 4: Whole life costing of construction projects</u></p> <ul style="list-style-type: none"> ▪ Sustainable building materials whole life costing ▪ Sustainable energy technologies whole life costing <p><u>Module 5: Sustainable Development Evaluation</u></p> <ul style="list-style-type: none"> ▪ The environmental footprint concept ▪ Application of sustainability schemes in the built environment (LEED, BREEAM, DGNB)
Textbooks:	Brandon, P. S., & Lombardi, P. (2010). Evaluating sustainable development in the built environment. John Wiley & Sons..
Instruction language	English
External reference	link