COURSE DETAIL

BIOMATERIALS ENGINEERING
Country Singapore
Host Institution National University of Singapore
Program(s) National University of Singapore
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Bioengineering
UCEAP Course Number 172
UCEAP Course Suffix
UCEAP Official Title BIOMATERIALS ENGINEERING
UCEAP Transcript Title BIOMATERIALS ENGR
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
Biomaterials involve the integration of engineering materials with biological entities in the body. The success of any implant or medical device depends very much on the biomaterials used. The course introduces life-science topics and provides an appreciation of multi-disciplinary approach to problem solving. Topics include biological materials, metals, polymers, ceramics and composites use as implants, relationship between structure-composition-manufacturing process, mechanical testing and evaluation of implants and numerous case studies ranging from heart valves to tissue engineering of bones. Video presentations and invited lectures from clinicians compliments the breadth covered in this course.

Language(s) of Instruction
English

Host Institution Course Number
ME4253

Host Institution Course Title
BIOMATERIALS ENGINEERING

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mechanical Engineering

Course Last Reviewed

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