**COURSE SYLLABUS**

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| **Course Title**：Materials for Renewable Energy Generation | | | | |
| **Credits / Hours** | 3/3 | **Course Number** |  | **□Required ■Elective** |
| **Course Description**  This course provides students with a basic knowledge about renewable energy. It introduces the relationship between energy and the environment, the impact of energy on human life, and then describe various types of renewable energy. Also, the working principles and application of various energy technologies would be discussed in this course. | | | | |
| **Course Topics** | | | | |
| **Topic** | | **Content** | | |
| Introduction | | 1. 1. What is renewable energy? 2. 2. Various renewable energy | | |
| Photovoltaics | | 1. Physics of photovoltaics 2. Various photovoltaics 3. Promising photovoltaics applications | | |
| Fuel cell | | 1. Working mechanism of fuel cells 2. Various fuel cells and their applications | | |
| Battery | | 1. Introduction of battery 2. Mechanism of battery 3. Various battery and their application | | |