



**AGH**

AKADEMIA GÓRNICZO-HUTNICZA  
IM. STANISŁAWA STASZICA  
W KRAKOWIE

Wydział: Energetyki i Paliw

Kierunek: Technologia Chemiczna

Poziom studiów: Studia II stopnia

Forma i tryb studiów: Stacjonarne

Specjalność: Sustainable Fuels Economy

Rocznik: 2013/2014

Język wykładowy: Angielski

| Kod   | Nazwa modułu                                   | Wykład | Ćwiczenia audytoryjne | Ćwiczenia laboratoryjne | Ćwiczenia projektowe | Konwersatorium | Zajęcia seminaryjne | Zajęcia praktyczne | Inne | Zajęcia terenowe | Zajęcia warsztatowe | E-learning | ECTS | Egz. |
|---|--|--------|-----------------------|-------------------------|----------------------|----------------|---------------------|--------------------|------|------------------|---------------------|------------|------|------|
| <b>Semestr 1</b>  |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| <b>Block SFE semester 1</b>                                   |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| Zasady wyboru grup/modułów: All subjects (courses) from group |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| STC-2-101-SF-s  | Physics of energy transformation and use       | 30     | 30                    | 30                      | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 7    | Tak  |
| STC-2-102-SF-s  | Environmental protection                       | 15     | 0                     | 15                      | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 4    | Nie  |
| STC-2-103-SF-s  | Chemical reactors engineering                  | 15     | 15                    | 0                       | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 2    | Tak  |
| STC-2-104-SF-s  | Energy technologies - batteries and fuel cells | 15     | 0                     | 30                      | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 5    | Nie  |
| STC-2-105-SF-s  | Energy technologies                            | 15     | 0                     | 30                      | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 3    | Nie  |
| STC-2-106-SF-s  | Fuels and energy distribution                  | 15     | 0                     | 15                      | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| STC-2-107-SF-s  | Energy markets                                 | 30     | 30                    | 0                       | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 5    | Tak  |
| STC-2-108-SF-s  | New chemical contaminants                      | 10     | 0                     | 20                      | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| Suma ECTS   |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            | 0    |      |
| <b>Semestr 2</b>  |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| <b>Block SFE semester 2</b>                                   |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| Zasady wyboru grup/modułów: All subjects (courses) from group |  |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| STC-2-201-SF-s  | Technologies modelling                         | 15     | 0                     | 10                      | 5                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| STC-2-202-SF-s  | Introduction to systems modelling              | 30     | 15                    | 0                       | 15                   | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 5    | Tak  |
| STC-2-203-SF-s  | Catalytic fuels technologies                   | 15     | 0                     | 0                       | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| STC-2-204-SF-s  | Biotechnology                                  | 15     | 0                     | 0                       | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| STC-2-205-SF-s  | Energy and environment                         | 30     | 0                     | 0                       | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 4    | Nie  |

## Program studiów - Technologia Chemiczna - 2013/2014

| Kod   | Nazwa modułu                              | Wykład | Ćwiczenia audytoryjne | Ćwiczenia laboratoryjne | Ćwiczenia projektowe | Konwersatorium | Zajęcia seminaryjne | Zajęcia praktyczne | Inne | Zajęcia terenowe | Zajęcia warsztatowe | E-learning | ECTS | Egz. |
|---|---|--------|-----------------------|-------------------------|----------------------|----------------|---------------------|--------------------|------|------------------|---------------------|------------|------|------|
| STC-2-206-SF-s  | Prospects of the fuels and energy economy | 15     | 0                     | 0                       | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| STC-2-207-SF-s  | Energy policy                             | 15     | 15                    | 0                       | 0                    | 0              | 15                  | 0                  | 0    | 0                | 0                   | 0          | 4    | Tak  |
| STC-2-208-SF-s  | Modelling of fuels and energy systems     | 15     | 0                     | 0                       | 15                   | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| STC-2-209-SF-s  | Chemistry of coal                         | 15     | 0                     | 15                      | 0                    | 0              | 0                   | 0                  | 0    | 0                | 0                   | 0          | 2    | Nie  |
| Suma ECTS   |   |        |                       |                         |                      |                |                     |                    |      |                  |                     |            | 30   |      |
| <b>Semestr 3</b>  |   |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| Praca dyplomowa   |   |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| STC-2-303-SF-s  | MSc thesis                                | 0      | 0                     | 0                       | 0                    | 0              | 0                   | 260                | 0    | 0                | 0                   | 0          | 20   | Tak  |
| <b>Block SFE semester 3</b>                                   |   |        |                       |                         |                      |                |                     |                    |      |                  |                     |            | 10   |      |
| Zasady wyboru grup/modułów: All subjects (courses) from group |   |        |                       |                         |                      |                |                     |                    |      |                  |                     |            |      |      |
| STC-2-301-SF-s  | MSc practice                              | 0      | 0                     | 0                       | 0                    | 0              | 0                   | 340                | 0    | 0                | 0                   | 0          | 8    | Nie  |
| STC-2-302-SF-s  | MSc seminar                               | 0      | 0                     | 0                       | 0                    | 0              | 0                   | 0                  | 0    | 0                | 30                  | 0          | 2    | Nie  |
| Suma ECTS   |   |        |                       |                         |                      |                |                     |                    |      |                  |                     |            | 30   |      |