

**Specjalność: INŻYNIERIA PROCESÓW OCHRONY ŚRODOWISKA**

| Kod przedmiotu      | Przedmiot                                               | Semestr I     |    |    |   |      |     | Semestr II    |   |    |    |      |     | Semestr III   |    |   |     |      |     |
|---------------------|---------------------------------------------------------|---------------|----|----|---|------|-----|---------------|---|----|----|------|-----|---------------|----|---|-----|------|-----|
|                     |                                                         | Liczba godzin |    |    |   | ECTS | E/Z | Liczba godzin |   |    |    | ECTS | E/Z | Liczba godzin |    |   |     | ECTS | E/Z |
|                     |                                                         | W             | C  | P  | L |      |     | W             | C | P  | L  |      |     | W             | C  | P | L   |      |     |
| 1070-IC000-MSP-111  | Dynamika procesowa                                      | 30            |    |    |   | 2    | E   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-IC000-MSP-112  | Mechanika płynów                                        | 30            |    |    |   | 2    | E   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-IC000-MSP-114  | Matematyka                                              | 30            |    |    |   | 2    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-IC000-MSP-JOS  | Język obcy specjalistyczny                              |               | 30 |    |   | 2    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-IC000-MSP-H110 | Praktyczne i ekonomiczne aspekty projektowania procesów | 30            |    | 15 |   | 3    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-IC000-MSP-Hx   | Przedmiot HES                                           |               | 30 |    |   | 2    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-ICIOS-MSP-101  | Ekologia                                                | 30            |    |    |   | 2    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-ICIOS-MSP-102  | Procesy oczyszczania gazów 1                            | 30            |    | 30 |   | 4    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-ICIOS-MSP-103  | Procesy oczyszczania cieczy 1                           | 30            |    |    |   | 2    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-ICIOS-MSP-106  | Membranowe procesy rozdzielania                         | 30            |    |    |   | 2    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-ICIOS-MSP-104  | Gospodarka odpadami stałymi                             | 30            |    | 15 |   | 3    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-ICIOS-MSP-105  | Polimery w ochronie środowiska                          | 30            |    | 30 |   | 4    | Z   |               |   |    |    |      |     |               |    |   |     |      |     |
| 1070-IC000-MSP-211  | Optymalizacja procesowa                                 |               |    |    |   |      |     | 30            |   | 30 |    | 5    | E   |               |    |   |     |      |     |
| 1070-IC000-MSP-212  | Obliczeniowa mechanika płynów                           |               |    |    |   |      |     | 30            |   |    | 30 | 5    | Z   |               |    |   |     |      |     |
| 1070-IC000-MSP-213  | Laboratorium dynamiki procesowej                        |               |    |    |   |      |     |               |   |    | 45 | 4    | Z   |               |    |   |     |      |     |
| 1070-IC000-MSP-OBx  | Przedmiot obieralny                                     |               |    |    |   |      |     | 30            |   |    |    | 2    | Z   |               |    |   |     |      |     |
| 1070-ICIOS-MSP-201  | Procesy oczyszczania gazów 2                            |               |    |    |   |      |     | 30            |   | 30 |    | 4    | E   |               |    |   |     |      |     |
| 1070-ICIOS-MSP-202  | Procesy oczyszczania cieczy 2                           |               |    |    |   |      |     | 30            |   |    | 45 | 6    | E   |               |    |   |     |      |     |
| 1070-ICIUR-MSP-203  | Laboratorium polimerów                                  |               |    |    |   |      |     |               |   |    | 45 | 4    | Z   |               |    |   |     |      |     |
| 1070-IC000-MSP-301  | Pracownia dyplomowa                                     |               |    |    |   |      |     |               |   |    |    |      |     |               |    |   | 150 | 8    | Z   |
| 1070-IC000-MSP-302  | Seminarium dyplomowe                                    |               |    |    |   |      |     |               |   |    |    |      |     |               | 30 |   |     | 2    | Z   |
| 1070-IC000-MSP-303  | Praca dyplomowa magisterska                             |               |    |    |   |      |     |               |   |    |    |      |     |               |    |   | 195 | 20   | Z   |
| do 2019Z            | ECTS w semestrze                                        | 30            |    |    |   |      |     | 30            |   |    |    |      |     | 30            |    |   |     |      |     |
|                     | Suma ECTS                                               |               |    |    |   |      |     | 90            |   |    |    |      |     |               |    |   |     |      |     |
|                     | Liczba godzin w semestrze                               | 450           |    |    |   |      |     | 375           |   |    |    |      |     | 375           |    |   |     |      |     |
|                     | Suma godzin                                             |               |    |    |   |      |     | 1200          |   |    |    |      |     |               |    |   |     |      |     |
|                     | ECTS obieralne                                          |               |    |    |   |      |     | 67            |   |    |    |      |     |               |    |   |     |      |     |
|                     | ECTS przedmioty HES                                     |               |    |    |   |      |     | 5             |   |    |    |      |     |               |    |   |     |      |     |