**DOKUMENTACJA PROGRAMU STUDIÓW** **Druk PS nr 6**

**KIERUNEK STUDIÓW: Inżynieria Materiałowa**

**Poziom kształcenia:** studia pierwszego stopnia

**Profil :** ogólnoakademicki

**Forma studiów:** stacjonarne

**Specjalność:** Inżynieria Materiałowa

**Specjalizacja : Badania materiałowe w kontroli jakości**

## 6. PLAN STUDIÓW

**Rozkład przedmiotów w semestrach z podaniem form zajęć i liczby godzin kontaktowych w jednym tygodniu zajęć**

Tygodniowy wymiar zajęć dydaktycznych (w godzinach dydaktycznych)

| Lp. | Kod przedm. | Nazwa przedmiotu | Typ przed | Σ godz. | I sem. | | | | | | | | | II sem. | | | | | | | | | III sem. | | | | | | | | | IV sem. | | | | | | | | | V sem. | | | | | | | | | VI sem. | | | | | | | | | VII sem. | | | | | | | | |
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| | | | | | W | Si | Ć | Lb | Pr | L | Ć-wf | ECTS | | W | Si | Ć | Lb | Pr | L | Ć-wf | ECTS | | W | Si | Ć | Lb | Pr | L | Ć-wf | ECTS | | W | Si | Ć | Lb | Pr | L | Ć-wf | ECTS | | W | Si | Ć | Lb | Pr | L | K | ECTS | | W | Si | Ć | Lb | Pr | L | Ć-wf | ECTS | | W | Si | Ć | Lb | Pr | L | Ć-wf | ECTS |
| | | Wykaz przedmiotów pogrupowanych według semestrów, jak na poniższym przykładzie | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | IM1_01/P | Matematyka 1 | P | 45 | 1 E | | 2 | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | IM1_02/P | Fizyka 1 | P | 45 | 2 E | | 1 | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | IM1_03/P | Chemia ogólna i analityczna 1 | P | 45 | 2 E | | 1 | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | IM1_04/P | Chemia organiczna | P | 60 | 2 | | | 2 | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | IM1_01/K | Geometria wykreślna | K | 30 | 1 | | | | 1 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | IM1_01/O | Technologia informacyjna | O | 30 | 1 | | | 1 | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | IM1_09/P | Podstawy metrologi | P | 15 | 1 | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | IM1_10/P | Podstawy nauki o materiałach | P | 15 | 1 | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | IM1_03/O | Wychowanie fizyczne 1 | O | 30 | | | | | | | 2 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | IM1_07/O | Przedmiot humanizujący 1 | O | 15 | 1 | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | IM1_12/O | Przedmiot humanizujący 2 | O | 30 | 2 | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | IM1_05/P | Matematyka 2 | P | 45 | | | | | | | | | | 1 E | | 2 | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | IM1_06/P | Fizyka 2 | P | 30 | | | | | | | | | | | | | 2 | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | IM1_07/P | Chemia ogólna i analityczna 2 | P | 30 | | | | | | | | | | | | | 2 | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | IM1_02/K | Rysunek techniczny | K | 30 | | | | | | | | | | | | | | 2 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | IM1_03/K | Grafika inżynierska z elementai CAD | K | 45 | | | | | | | | | | 1 | | | | 2 | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | IM1_12/K | Mikroskopowe metody badań materiałów | K | 45 | | | | | | | | | | 1 | | | 2 | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | IM1_04/K | Nauka o materiałach | K | 60 | | | | | | | | | | 2 E | | | 2 | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | IM1_05/O | Ochrona własności intelektualnej | O | 15 | | | | | | | | | | 1 | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | IM1_04/O | Wychowanie fizyczne 2 | O | 30 | | | | | | | | | | | | | | | 2 | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | IM1_08/O | Język obcy 1 | O | 30 | | | | | | | | | | | | | | 2 | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | IM1_14/K | Termiczne metody badań materiałów | K | 45 | | | | | | | | | | | | | | | | | | | 1 | | | | 2 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | IM1_08/P | Wybrane zagadnienia fizykochemiczne w inżynierii mat | P | 75 | | | | | | | | | | | | | | | | | | | 2 | | | 1 | 2 | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | IM1_05/K | Metaloznawstwo I | K | 30 | | | | | | | | | | | | | | | | | | | 1 | | | | 1 | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | IM1_06/K | Materiały i technologie ceramiczne | K | 75 | | | | | | | | | | | | | | | | | | | 3 E | | | | 2 | | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | IM1_07/K | Materiały polimerowe | K | 75 | | | | | | | | | | | | | | | | | | | 3 E | | | | 2 | | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | IM1_08/K | Materiały włókiennicze | K | 75 | | | | | | | | | | | | | | | | | | | 2 E | | | | 3 | | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | IM1_09/K | Podstawy statyki i wytrzymałość materiałów | K | 60 | | | | | | | | | | | | | | | | | | | 2 | | | 1 | 1 | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | IM1_09/O | Język obcy 2 | O | 30 | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | IM1_10/K | Materiały i technologie kompozytowe | K | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 E | | 2 | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | IM1_11/K | Odlewnictwo | K | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 2 | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | IM1_16/K | Przetwórstwo tworzyw sztucznych | K | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 E | | | | 1 | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | IM1_13/K | Spektroskopowe metody badań materiałów | K | 75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 E | | | 3 | | | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | IM1_10/O | Język obcy 3 | O | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | IM1_17/K | Badania jakościowe wody użytkowej | K | 75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 3 | | | | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | IM1_15/K | Rentgenografia | K | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | 1 | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | IM1_22/K | Zarządzanie jakością | K | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 38 | IM1_11/OS | Metody zarządzania jakością | OS | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | IM1_18/K | Efektywność energetyczna obiektów i urządzeń | K | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 2 | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | IM1_11/O | Język obcy 4 | O | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 E | | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 41 | IM1_23/K | Metody recyklingu i odzysku materiałów | K | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 E | | | | 1 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 42 | IM1_16/OS | Biomateriały | OS | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 E | | | 2 | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 43 | IM1_20/K | Metaloznawstwo II | K | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 E | | 1 | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | IM1_19/K | Polimery specjalne | K | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 2 | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 45 | IM1_24/K | Systemy zarządzania środowiskiem | K | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 46 | IM1_27/K | Nowoczesne metody badań materiałów | K | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | IM1_14/OS | Metrologia praktyczna | OS | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 2 | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 48 | IM1_18/OS | Materiały opakowaniowe | OS | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | 1 | | | | 4 | | | | | | | | | | | | |
| 49 | IM1_12/OS | Projektowanie systemów zarządzanie jakością Metody | OS | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | | | | | 2 | | | | | | | | | | | | |
| 50 | IM1_25/K | Podstawy zarządzania i zarządzanie projektami | K | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | 1 | | | 2 | | | | | | | | | | | | |
| 51 | IM1_13/OS | Ocena systemów zarządzania | OS | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 E | | 1 | | | | | 2 | | | | | | | | | | | | |
| 52 | IM1_26/K | Elektrotechnika | K | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 E | | | 1 | | | | 2 | | | | | | | | | | | | |
| 53 | IM1_06/O | Techniki opracowania danych pomiarowych | O | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | | | | | 2 | | | | | | | | | | | | |
| 54 | IM1_11/P | Fizyka polimerów | P | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | 2 | | | | | | | | | | | | |
| 55 | IM1_19/OS | Defektoskopia i kontrola wyrobów | OS | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | | | | | 2 | | | | | | | | | | | | |
| 56 | IM1_21/K | Obróbka plastyczna | K | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 1 | | | | 2 | | | | | | | | | | | | |
| 57 | IM1_15/OS | Przemysłowe systemy wizyjne w kontroli jakości | OS | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 1 | | | | 2 | | | | | | | | | | | | |
| 58 | IM1_17/OS | Analiza przyczyn powstawania wad materiałowych | OS | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 1 | | | | | | | | | | | |
| 59 | IM1_13/O | Przedmiot humanizujący 3 | O | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | 2 |
| 60 | IM1_20/OS | Design thinking | OS | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 E | | | | 2 | | | 4 |
| 61 | IM1_02/O | Ergonomia i BHP | O | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | 1 |
| 62 | IM1_21/OS | Aspekty prawne procesu reklamacji i ochrony | OS | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | 2 |
| 63 | IM1_22/OS | Case study in materials science | OS | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | 2 |
| 64 | IM1_01/SD | Seminarium dyplomowe | S | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | 1 |
| 65 | - | Praktyki zawodowe | K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 66 | - | Egzamin dyplomowy i praca dyplomowa | K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 |
| | | RAZEM | X | X | 14 | 0 | 4 | 3 | 1 | 0 | 2 | 27 | 6 | 0 | 2 | 8 | 4 | 2 | 2 | 29 | 14 | 0 | 2 | 11 | 2 | 2 | 0 | 35 | 11 | 0 | 4 | 9 | 1 | 2 | 0 | 0 | 33 | 13 | 0 | 3 | 8 | 1 | 2 | 1 | 34 | 11 | 0 | 5 | 4 | 2 | 0 | 0 | 23 | 7 | 1 | 0 | 0 | 2 | 0 | 0 | 31 |
| | | Łączna liczba godzin w jednym tygodniu zajęć | X | X | 24 | | | | | | | X | 24 | | | | | | | X | 31 | | | | | | | X | 27 | | | | | | | X | 28 | | | | | | | X | 22 | | | | | | | X | 10 | | | | | | | X |