**PLAN STUDIÓW STACJONARNYCH PIERWSZEGO STOPNIA INŻYNIERSKICH** **Załącznik Nr 2 do Uchwały Senatu nr 151 /2019**

Wydział: Wydział Zamiejscowy w Sandomierzu

Instytut Techniczny

**Kierunek: mechatronika, profil praktyczny 2017-2021**

Rodzaj zajęć: I WY II ĆW/LAB III SM/Wa/Pr

| Lp. | Przedmiot | kod | forma zal. po semestrze * | | | Rozkład I rok 1 semestr | | | | I rok 2 semestr | | | | II rok 3 semestr | | | | II rok 4 semestr | | | | III rok 5 semestr | | | | III rok 6 semestr | | | | IV rok 7 semestr | | | | Razem godz. | Całkowity nakład | Razem ECTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | E | ZO | Z | I | II | III | ECTS | I | II | III | ECTS | I | II | III | ECTS | I | II | III | ECTS | I | II | III | ECTS | I | II | III | ECTS | I | II | III | ECTS | | | |
| | **MODUŁ OGÓLNOUCZELNIANY** | $M_{0231_01}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Lektorat języka obcego* | 0714-8ME-A01-JO | 4 | 1,2,3,4 | | | 30 | | 2 | | 30 | | 2 | | 30 | | 2 | | 30 | | 3 | | | | | | | | | | | | | 120 | 225 | 9 |
| 2 | *Technologia informacyjna* | 0714-8ME-A02-TI | | 2 | | | | | | | 30 | | 1 | | | | | | | | | | | | | | | | | | | | | 30 | 30 | 1 |
| 3 | *Ochrona własności intelektualnej* | 0714-8ME-A03-OWI | | 6 | | | | | | | | | | | | | | | | | | | | | | 15 | | | 1 | | | | | | | |
| | *Przedsiębiorczość* | 0714-8ME-A04-PRZ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | 25 | 1 |
| 4 | *Przedmioty z obszaru nauk humanistycznych i społecznych:* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *Historia nauki i techniki* | 0714-8ME-A05-HNT | | 1 | | 15 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 15 | 25 | 1 |
| | *Etyka* | 0714-8ME-A06-E | | 2 | | | | | | | 30 | | 2 | | | | | | | | | | | | | | | | | | | | | 30 | 50 | 2 |
| | *Zarządzanie i organizacja produkcji* | 0714-8ME-A07-ZOP | | 3 | | | | | | | | | | | 30 | | 2 | | | | | | | | | | | | | | | | | 30 | 50 | 2 |
| 5 | *Przedmioty w zakresie wsparcia studentów w procesie uczenia się:* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *1) Zasady zdrowego stylu życia* | 0714-8ME-A08-xxx | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| | *2) Psychobiologiczne podstawy mowy ciała* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *3) Narzędzia informatyki wspomagające przygotowanie pracy dyplomowej* | | | 2 | | | | | | | 30 | | 2 | | | | | | | | | | | | | | | | | | | | | 30 | 50 | |
| | *4) Satystyczna analiza danych* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *5) Autoprezentacja i wystąpienia publiczne* | 0714-8ME-A09-xxx | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | *Wychowanie fizyczne* | 0714-8ME-A10-BE | | 1,2 | | | 30 | | | | 30 | | | | | | | | | | | | | | | | | | | | | | | 60 | 60 | |
| 7 | *BHP i ergonomia* | 0714-8ME-A11-PB | | | 2 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | |
| 8 | *Przysposobienie biblioteczne* | 0714-8ME-A12-PB | | | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | |
| | **razem** | | | | | 17 | 60 | 0 | 3 | 2 | 150 | 0 | 7 | 0 | 60 | 0 | 4 | 0 | 30 | 0 | 3 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 334 | 519 | 18 |
| | **MODUŁ PODSTAWOWY/KIERUNKOWY** | $M_{0231_02}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Wprowadzenie do mechatroniki* | 0714-8ME-C01-WDM | 2 | 2 | | 30 | 15/15 | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 2 | *Matematyka* | 0714-8ME-B01-M | 3 | 1,2,3 | | 30 | 30/ | | 5 | 30 | 30/ | | 5 | 30 | 30/ | | 5 | | | | | | | | | | | | | | | | | 180 | 375 | 15 |
| 3 | *Fizyka* | 0714-8ME-B02-F | 1 | 1 | | 30 | 15/15 | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 4 | *Mechanika techniczna* | 0714-8ME-C02-MT | 1 | 1 | | 30 | 15/15 | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 5 | *Informatyka inżynierska* | 0714-8ME-C03-PI | | 1 | | 15 | 15/ | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 50 | 2 |
| 6 | *Elektrotechnika* | 0714-8ME-C04-E | 1 | 1 | | 30 | 15/15 | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 7 | *Wytrzymałość materiałów* | 0714-8ME-C05-WM | 2 | 2 | | | | | | 30 | 15/15 | | 5 | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 8 | *Grafika inżynierska* | 0714-8ME-C06-GI | 2 | 2 | | | | | | 30 | 30/ | | 5 | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 9 | *Konstrukcja maszyn* | 0714-8ME-C07-KM | 2 | 2 | | | | | | 30 | 30/ | | 5 | | | | | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 10 | *Automatyka* | 0714-8ME-B03-A | 3 | 2,3 | | | | | | 15 | 15/ | | 3 | 15 | 15/ | | 3 | | | | | | | | | | | | | | | | | 60 | 150 | 6 |
| 11 | *Sieci komputerowe* | 0714-8ME-C08-SK | | 3 | | | | | | | | | | 15 | /15 | | 3 | | | | | | | | | | | | | | | | | 30 | 75 | 3 |
| 12 | *Elektronika* | 0714-8ME-C09-E | 3 | 3 | | | | | | | | | | 30 | 15/15 | | 5 | | | | | | | | | | | | | | | | | 60 | 125 | 5 |
| 13 | *Nauka o materiałach* | 0714-8ME-B04-NOM | 3 | 3 | | | | | | | | | | 30 | 30/30 | | 6 | | | | | | | | | | | | | | | | | 90 | 150 | 6 |
| 14 | *Metrologia techniczna i systemy pomiarowe* | 0714-8ME-C10-MTSP | 3 | 3 | | | | | | | | | | 15 | 15/15 | | 4 | | | | | | | | | | | | | | | | | 45 | 100 | 4 |
| 15 | *Inżynieria wytwarzania* | 0714-8ME-C11-IW | 4 | 4 | | | | | | | | | | | | | | 30 | 15/15 | | 5 | | | | | | | | | | | | | 60 | 125 | 5 |
| 16 | *Programowanie komputerów* | 0714-8ME-C12-PK | | 4 | | | | | | | | | | | | | | 30 | 15/15 | | 5 | | | | | | | | | | | | | 60 | 125 | 5 |
| 17 | *Robotyka* | 0714-8ME-B05-R | 5 | 5 | | | | | | | | | | | | | | | | | | 15 | 15/15 | | 4 | | | | | | | | | 45 | 100 | 4 |
| 18 | *Technika automatyki* | 0714-8ME-B06-TA | 5 | 5 | | | | | | | | | | | | | | | | | | 15 | 15/15 | | 3 | | | | | | | | | 15 | 75 | 3 |
| 19 | *Modelowanie bryłowe* | 0714-8ME-B07-MB | 5 | 5 | | | | | | | | | | | | | | | | | | 15 | 15/15 | | 3 | | | | | | | | | 45 | 75 | 3 |
| 20 | *Energoelektronika* | 0714-8ME-C13-En | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 15 | /30 | | 3 | | | | | 45 | 75 | 3 |
| 21 | *Elementy pomiarowe automatyki* | 0714-8ME-B08-EPA | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 15 | /30 | | 3 | | | | | 45 | 75 | 3 |
| 22 | *Optymalizacja konstrukcji* | 0714-8ME-B09-OK | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | 30/ | | 3 | 45 | 75 | 3 |
| 23 | *Reologia płynów przemysłowych* | 0714-8ME-B10-RPP | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | /30 | | 3 | 45 | 75 | 3 |
| | **razem** | | | | | 165 | 0 | 0 | 27 | 135 | 0 | 0 | 23 | 135 | 0 | 0 | 26 | 60 | 0 | 0 | 10 | 45 | 0 | 0 | 10 | 30 | 0 | 0 | 6 | 30 | 0 | 0 | 6 | 1320 | 2700 | 108 |
| | **MODUŁ DYPLOMOWY** | $M_{0231_03}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Projekt* | 0714-8ME-E01-P | | | 6 | | | | | | | | | | | | | | | | | | | | | | | 30/ | 3 | | | | | 30 | 75 | 3 |
| 2 | *Seminarium dyplomowe* | 0714-8ME-E02-SD | | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | 30/ | 2 | 30 | 50 | 2 |
| 3 | *Praca dyplomowa* | 0714-8ME-E03-PD | | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | | 175 | 7 |
| | **razem** | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 9 | 60 | 300 | 12 |
| | **MODUŁ SPECJALNOŚCIOWY I Budowa i eksploatacja maszyn** | $M_{0231_05}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Eksploatacja maszyn* | 0714-8ME-D01-EM | 4 | 4 | | | | | | | | | | | | | | 30 | 30/15 | | 6 | | | | | | | | | | | | | 75 | 150 | 6 |
| 2 | *Aktuatoryka hydrotroniczna* | 0714-8ME-D02-AH | 4 | 4 | | | | | | | | | | | | | | 30 | 45/ | | 6 | | | | | | | | | | | | | 75 | 150 | 6 |
| 3 | *Mechanizmy maszyn i robotów* | 0714-8ME-D03-MMR | 5 | 5 | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | | | | | 75 | 125 | 5 |
| 4 | *Drukarki 3D* | 0714-8ME-D04-MSP | 5 | 5 | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | | | | | 75 | 125 | 5 |
| 5 | *Aktuatoryka pneumotroniczna* | 0714-8ME-D05-AP | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | 75 | 125 | 5 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | *Maszyny przepływowe* | 0714-8ME-D06-MP | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | 75 | 125 | 5 |
| 7 | *Praktyka zawodowa* | 0714-8ME-D07-PZ | | 4,5,6 | | | | | | | | | | | | | | | 150 (10)* | 5 | | | 150 (10)* | 5 | | | 150 (10)* | 5 | | | | | 450 | 480 | 15 |
| **razem** | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 17 | 60 | 0 | 0 | 15 | 30 | 0 | 0 | 10 | 30 | 0 | 0 | 5 | 900 | 1280 | 47 |
| **MODUŁ SPECJALNOŚCIOWY II Komputerowe wspomaganie konstrukcji maszyn** | | $M_{0231_05}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Sterowniki programowalne* | 0714-8ME-D08-SP | 4 | 4 | | | | | | | | | | | | | | 30 | 30/15 | | 6 | | | | | | | | | | | | 75 | 150 | 6 |
| 2 | *Cyfrowy zapis obrazu* | 0714-8ME-D09-CZO | 4 | 4 | | | | | | | | | | | | | | 30 | 45/ | | 6 | | | | | | | | | | | | 75 | 150 | 6 |
| 3 | *Symulacje komputerowe w mechatronice* | 0714-8ME-D10-SKM | 5 | 5 | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | | | | 75 | 125 | 5 |
| 4 | *Komputerowe wspomaganie w mechatronice* | 0714-8ME-D11-KWM | 5 | 5 | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | | | | 75 | 125 | 5 |
| 5 | *Systemy decyzyjne w mechatonice* | 0714-8ME-D12-SDM | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | 75 | 125 | 5 |
| 6 | *Systemy CAD/CAM* | 0714-8ME-D13-SCAD | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | 5 | 75 | 125 | 5 |
| 7 | *Praktyka zawodowa* | 0714-8ME-D14-PZ | | 4,5,6 | | | | | | | | | | | | | | | 150 (10)* | 5 | | | 150 (10)* | 5 | | | 150 (10)* | 5 | | | | | 450 | 480 | 15 |
| **razem** | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 17 | 60 | 0 | 0 | 15 | 30 | 0 | 0 | 10 | 30 | 0 | 0 | 5 | 900 | 1280 | 47 |
| **MODUŁ FAKULTATYWNY I - Informatyka, nowe technoligie w mechatronice** | | $M_{0231_05}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Algorytmy i metody numeryczne* | 0714-8ME-F01-AMN | 5 | 5 | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | | | | 75 | 125 | 5 |
| 2 | *Bazy danych i systemy eksperckie* | 0714-8ME-F02-BDSE | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | 75 | 125 | 5 |
| 3 | *Programowanie obrabiarek CNC* | 0714-8ME-F03-POCNC | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | 75 | 125 | 5 |
| 4 | *Metody sztucznej inteligencji* | 0714-8ME-F04-MSI | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | 5 | 75 | 125 | 5 |
| 5 | *Programowanie mikroprocesorów* | 0714-8ME-F05-PM | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | 5 | 75 | 125 | 5 |
| **razem** | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 5 | 60 | 0 | 0 | 10 | 60 | 0 | 0 | 10 | 375 | 625 | 25 |
| **MODUŁ FAKULTATYWNY II - Elektronika, sygnał cyfrowy, sterowanie** | | $M_{0231_05}$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | *Materiały o zmiennych właściwościach* | 0714-8ME-F06-MZW | 5 | 5 | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | | | | | 75 | 125 | 5 |
| 2 | *Sterowanie napędów elektrycznych* | 0714-8ME-F07-SNE | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | 75 | 125 | 5 |
| 3 | *Transmisja danych cyfrowych* | 0714-8ME-F08-TDC | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | | 5 | | | | 75 | 125 | 5 |
| 4 | *Sensoryka robotów* | 0714-8ME-F09-SR | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | 5 | 75 | 125 | 5 |
| 5 | *Systemy diagnostyczne* | 0714-8ME-F10-SD | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 45/ | 5 | 75 | 125 | 5 |
| **razem** | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 60 | 0 | 0 | 10 | 300 | 625 | 25 |
| **razem :** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **razem :** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Praktyka zawodowa** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Moduły razem** | | | | | | 182 | 60 | 0 | 30 | 137 | 150 | 0 | 30 | 135 | 60 | 0 | 30 | 120 | 30 | 0 | 30 | 135 | 0 | 0 | 30 | 135 | 0 | 0 | 30 | 120 | 0 | 0 | 30 | 2989 | 5424 | 210 |

**Zatwierdziła Rada Wydziału na posiedzeniu w dniu 25.09.2018**

* godziny kontaktowe

bez praktyk= 2539