**Wydział Budownictwa i Architektury**

Nazwa kierunku studiów: **Inżynieria środowiska**
Obszar/obszary kształcenia: **nauki techniczne, studia inżynierskie**
Profil kształcenia: **ogólnoakademicki**
Forma studiów: **stacjonarna**
Poziom kształcenia: **pierwszy**
Specjalność/specjalizacja: **Alternatywne Źródła Energii w Budownictwie**
Kod planu studiów: **IS 1A S 2017 2018 Z -**

Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Rok akademicki: 2017/2018
Obowiązuje od: 2017-10-01
Uchwała Rady Wydziału nr: 92/2016/2017, z dn. 2017-05-17

## Plan Studiów

| Semestr | Moduł / przedmiot | Liczba godzin W | A | L | P | Forma zajęć L | LK | P | PD | PR | SD | Suma ECTS | Punkty ECTS | Kryterium ECTS | I RGK I semestr Zajęcia wyk. W | A | L | P | ECTS | Zajęcia prakt. L | LK | P | PD | PR | SD | ECTS | I RGK II semestr Zajęcia wyk. W | A | L | P | ECTS | Zajęcia prakt. L | LK | P | PD | PR | SD | ECTS | II RGK III semestr Zajęcia wyk. W | A | L | P | ECTS | Zajęcia prakt. L | LK | P | PD | PR | SD | ECTS | III RGK IV semestr Zajęcia wyk. W | A | L | P | ECTS | Zajęcia prakt. L | LK | P | PD | PR | SD | ECTS | IV RGK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Moduły/Przedmioty kształcenia ogólnego** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1 | Blok obieralny 1 | 0 | 1 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 2.0 | 30 z | | | | 2.0 | | | | | | | 2.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| 2 1 | Blok obieralny 2 | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | 15 z | | | | 1.0 | | | | | | | 1.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IA003 Technologia informacyjna | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | 0.0 | 15 z | | | | 0.8 | 15 z | 1.2 | 2.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| 3 1 | Blok obieralny 3 | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | | | | | 1.0 | | | | | | | | 0.0 | 15 z | | | | | 1.0 | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IA04 Podstawy CAD | 0 | 2 | 45 | 15 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 3.0 | 2.0 | 1.5 | 15 z | | 3.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IA05-1 Wychowanie fizyczne-1 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | | | | 1.0 | 0.0 | | | | | | | | 1.0 | 15 z | | | | 1.0 | | | | | | 1.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IA05-2 Wychowanie fizyczne-2 | 0 | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | 30 z | | | | 1.0 | | | | | | | | 1.0 | | | | | | | | | | | | | 1.0 |
| | S1IA06 Zagadnienia bezpieczeństwa pracy | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 0.5 | | | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | 15 z | | | | 1.0 | | | | | | | | 1.0 |
| 4 1 | Blok obieralny 4 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 3.0 | 3.0 | 1.5 | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| 5 1 | Blok obieralny 5 | 0 | 1 | 60 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 3.0 | 3.0 | 1.5 | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 3.0 | 60 z | | | | | | | | | | | | 0.0 |
| 6 1 | Blok obieralny 6 | 0 | 1 | 60 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 4.0 | 4.0 | 2.0 | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | 60 z | | | | | 4.0 | 0.0 |
| 7 1 | Blok obieralny 7 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 2.0 | 2.0 | 1.0 | | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | 30 z | 2.0 | 2.0 |
| | S1IA09-1 Praca dyplomowa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15.0 | 15.0 | 15.0 | | | | | 0.0 | | | | | | | | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | 0 z | 15.0 | 15.0 |
| Razem | | 1 | 14 | 375 | 105 | 45 | 0 | 0 | 45 | 150 | 0 | 0 | 30 | 39.0 | 30.2 | 20.0 | 30.0 | 60 | 0 | 0 | 0 | 0 | 4.0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 6.0 | 15 | 0 | 0 | 0 | 0.8 | 15 | 0 | 0 | 0 | 0 | 0 | 1.2 | 2.0 | 15 | 15 | 0 | 0 | 2.0 | 0 | 30 | 0 | 0 | 0 | 0 | 3.0 | 5.0 | 0 | 30 | 0 | 0 | 1.0 | 0 | 60 | 0 | 0 | 0 | 0 | 3.0 | 4.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 60 | 0 | 0 | 0 | 0 | 4.0 | 4.0 | 15 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 17.0 | 17.0 |
| **Moduły/Przedmioty kształcenia podstawowego** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S1IB101-1 Matematyka-1 | 1 | 1 | 30 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 7.0 | 0.0 | 3.0 | 45 z | 45 z | | | 7.0 | | | | | | | 7.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB101-2 Matematyka-2 | 1 | 1 | 30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.0 | | | | | 3.0 | | | | | | | 3.0 | 0.0 | 15 z | 15 z | | | | 3.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB102 Fizyka | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 5.0 | 3.0 | 2.0 | 30 z | | | | 3.0 | 3.0 | | | | | | 3.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB103 Biologia i ekologia | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 4.0 | 2.0 | 2.0 | 30 z | | | | 2.0 | 30 z | | | | | | 2.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB104 Geologia | 2 | 0 | 60 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 0 | 2.0 | 30 z | | | | 2.0 | 30 z | | | | | | 2.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB105 Rysunek techniczny | 0 | 1 | 15 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 1.0 | 1.0 | 0.5 | | | 1.0 | 15 z | | | | | | 1.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB106 Geologia | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 3.0 | 1.5 | 2.0 | 15 z | | 1.5 | 3.0 | | | | | | 1.5 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB107 Chemia | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 6.0 | 3.0 | 2.0 | | | 3.0 | 30 z | | | | 3.0 | 30 z | 3.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB108 Geometria wykreślna | 1 | 1 | 45 | 15 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 1.5 | | | 4.0 | | | | | | | 4.0 | 0.0 | 15 w | 30 z | | | | 4.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB109-1 Hydrologia i gospodarka wodna-1 | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 3.0 | 1.0 | 1.5 | | | 1.0 | 3.0 | | | | | | 1.0 | 0.0 | 30 z | | | | | 3.0 | | | | | 2.0 | 15 z | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB109-2 Hydrologia i gospodarka wodna-2 | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 2.0 | 1.0 | 2.0 | | | | | | | | | | | 0.0 | 15 z | | | | 1.0 | | | | 15 z | | 1.0 | 2.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB110-1 Metody komputerowe w CS-1 | 0 | 1 | 45 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 2.0 | | | | | | | 2.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | 45 z | 2.0 | | | | | | | | | | | | 2.0 |
| | S1IB110-2 Metody komputerowe w CS-2 | 0 | 1 | 45 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 2.0 | | | | | | | 2.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB111 Mechanika i wytrzymałość materiałów | 1 | 1 | 60 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 2.0 | | | | | 4.0 | | | | | | | 4.0 | 0.0 | 30 z | 30 z | | | | 4.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB112-1 Podstawy termodynamiki technicznej-1 | 0 | 2 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 5.0 | 0.0 | 2.0 | | | | | 5.0 | 30 z | | | | | | 5.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB112-2 Podstawy termodynamiki technicznej-2 | 1 | 0 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.0 | | | | | 3.0 | | | | | | | 3.0 | 0.0 | 30 a | | | | 3.0 | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB113 Materiałoznawstwo | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 0.0 | 1.5 | 15 z | | | | 1.5 | 3.0 | | | | | | 1.5 | 3.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB114-1 Mechanika płynów-1 | 1 | 2 | 60 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 5.0 | 1.4 | 2.0 | | | 1.4 | 5.0 | | | | | | 1.4 | 5.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB114-2 Mechanika płynów-2 | 1 | 1 | 30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.0 | | | | | 3.0 | 3.0 | | | | | | 3.0 | 0.0 | 15 w | 15 z | | | | 3.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB115 Materiały budowlane | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 0.0 | | | | | 1.0 | | | | | | | 1.0 | 0.0 | 15 z | | | | 1.0 | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB116 Podstawy budownictwa | 1 | 1 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 4.0 | 1.5 | 1.5 | | | | | 4.0 | 1.5 | | | | | | 4.0 | 0.0 | 30 a | | | | 2.5 | | | | 15 z | | 4.0 | 1.5 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IB117 Podstawy ochrony środowiska | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 2.0 | | | | | | | 2.0 | 0.0 | 30 z | | | | 2.0 | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| Razem | | 11 | 28 | 975 | 480 | 150 | 90 | 0 | 0 | 225 | 0 | 30 | 0 | 76.0 | 21.9 | 33.0 | 150 | 45 | 0 | 0 | 14.5 | 120 | 0 | 0 | 0 | 0 | 9.5 | 24.0 | 185 | 75 | 0 | 0 | 19.5 | 90 | 0 | 0 | 0 | 0 | 7.5 | 30.0 | 90 | 15 | 0 | 0 | 8.8 | 15 | 0 | 15 | 0 | 0 | 0 | 2.4 | 11.0 | 75 | 15 | 0 | 0 | 7.5 | 0 | 0 | 15 | 0 | 0 | 0 | 1.5 | 9.0 | 0 | 0 | 45 | 0 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 2.0 | 0 | 0 | 45 | 0 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| **Moduły/Przedmioty kształcenia kierunkowego** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 1 | Blok obieralny 8 | 1 | 1 | 45 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 30 a | 15 z | | | | 4.0 | | | | | | | 4.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC001 Pompy wentylatory i sprężarki | 1 | 1 | 45 | 30 | 0 | 0 | 15 | 0 | 0 | 0 | 4.0 | 1.7 | 1.5 | | | | | 0.0 | 30 a | | | | | | 0.0 | 2.3 | 15 z | | | | 1.7 | 4.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC003-1 Sieci i instal wod.-kan. c.w.u. i gazu-1 | 2 | 0 | 60 | 15 | 0 | 0 | 0 | 45 | 0 | 0 | 4.0 | 3.5 | 2.0 | | | | | 0.0 | 15 z | | | 45 z | | | 0.0 | 1.5 | | | | | 2.5 | 4.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC003-2 Sieci i instal wod.-kan. c.w.u. i gazu-2 | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 3.0 | 3.0 | | | | | | 0.0 | 30 z | | | | 1.5 | | | 15 z | | | | 1.5 | 3.0 | | | | | | | | | | | | | 0.0 |
| | S1IC004 Systemy informacji przedsiębiorstw | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.0 | 1.5 | | | | | 1.0 | 15 z | | | | | | 1.0 | 0.0 | 15 z | | | | 3.0 | 15 z | | | | | | 3.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC005 Mechanika gruntów i geotechnika | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 30 z | | | | 1.5 | | | | | | | 1.5 | 3.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC006-1 Ogrzewnictwo-1 | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | 30 z | | | | | | 0.0 | 2.0 | 30 z | | | | 2.0 | | | | | | | 2.0 | 3.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC006-2 Ogrzewnictwo-2 | 1 | 2 | 90 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 2.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 30 w | | | | 1.0 | 30 z | | | 30 z | | 2.0 | 3.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC006-3 Ogrzewnictwo-3 | 2 | 0 | 60 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 3.0 | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | 30 z | | | | | | | | | | 3.0 | 3.0 |
| | S1IC007-1 Podstawy technologii wody i ścieków-1 | 2 | 0 | 60 | 30 | 0 | 0 | 15 | 0 | 0 | 0 | 5.0 | 2.4 | 2.5 | | | | | 0.0 | 30 w | | | | | | 0.0 | 2.5 | 15 z | | | | 2.4 | 5.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC007-2 Podstawy technologii wody i ścieków-2 | 0 | 2 | 45 | 15 | 0 | 0 | 0 | 30 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 15 z | | | | | 0.0 | | | | | 0.8 | | 30 z | | | | 1.2 | 2.0 | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC008-1 Wodociągi i kanalizacja-1 | 0 | 2 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 4.0 | 2.2 | 2.0 | | | | | 0.0 | 30 z | | | | | | 0.0 | 1.8 | | | | | 2.2 | 4.0 | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC008-2 Wodociągi i kanalizacja-2 | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 1.7 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 30 w | | | | | | 3.0 | | | | | | 1.3 | | 30 z | | | | 1.7 | 3.0 | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC008-3 Wodociągi i kanalizacja-3 | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 1.5 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 30 a | | | | | 0.0 | | | | | | | 0.0 | | | | 1.5 | | | | | 30 z | | 1.5 | 3.0 | | | | | | | | | | | | | 0.0 |
| | S1IC009 Inżynieria ochrony atmosfery | 0 | 2 | 45 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 30 z | 15 z | | | | 3.0 | | | | | | | 3.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC010 Melioracje | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 15 z | | | | 0.8 | | | | 15 z | | 1.2 | 2.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC011 Podst. uzdat. wody i oczyszcz. ścieków | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.6 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 30 z | | | | 1.4 | | | | 15 z | | 1.6 | 3.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| 9 1 | Blok obieralny 9 | 0 | 2 | 45 | 15 | 0 | 0 | 30 | 0 | 0 | 0 | 4.0 | 3.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 15 z | | | | 1.0 | 30 z | | | | | 3.0 | 4.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC013 Gospodarka odpadami | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 15 z | | | | 0.8 | | | | 15 z | | 1.2 | 2.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC014 Akustyka w inżynierii środowiska | 0 | 2 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 2.0 | 1.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 15 z | | | | 1.0 | 15 z | | | | | 1.0 | 2.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | S1IC015 Teoretyczne podstawy ogrzewnictwa i klimatyzacji | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 1.5 | 3.0 | | | | | | 0.0 | 30 z | | | 2.0 | | | 15 z | | 1.5 | 3.0 | | | | | | | | | | | | | 0.0 |
| | S1IC016 Wentylacja i klimatyzacja | 1 | 1 | 90 | 45 | 0 | 0 | 0 | 45 | 0 | 0 | 5.0 | 2.7 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 2.7 | 5.0 | | | | | | 0.0 | 45 w | | | 2.3 | | | 45 z | | 2.7 | 5.0 | | | | | | | | | | | | | 0.0 |
| | S1IC017 Źródła ciepła-1 | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 1.0 | 2.0 | | | | | | 0.0 | 30 z | | | 2.0 | | | 15 z | | 1.0 | 2.0 | | | | | | | | | | | | | 0.0 |
| | S1IC018 Podstawy cieplownictwa | 1 | 1 | 60 | 45 | 0 | 0 | 45 | 0 | 0 | 0 | 4.0 | 0.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 4.0 | | | | | | | 0.0 | 45 w | | | 45 z | 4.0 | | | | | | | 4.0 | | | | | | | | | | | | | 0.0 |
| | S1IC019 Sprzęganie urządzenia sanitarne | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 1.5 | 3.0 | | | | | | 0.0 | 15 z | | | 1.5 | | | 15 z | | 1.5 | 3.0 | | | | | | | | | | | | | 0.0 |
| | S1IC020 Dokumentacja hydrot. i pozwol. wodno-prawne | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | 30 z | | | | | | | | | | | 2.0 | | | | | | | | | | | | | 2.0 |
| | S1IC021 Gleboznawstwo i rekultywacja | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.8 | 2.5 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | 15 z | | | | | | | 15 z | | 1.2 | | | | | | | | | | | | | 1.8 | 3.0 |
| | S1IC022 Wyceny kosztów inwestycyjnych | 0 | 2 | 45 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | 15 z | | | | | | | 15 z | | 0.0 | | | | | | | | | | | | | 0.0 | |
| | S1IC023 Prawo w inżynierii środowiska | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 0.0 | 30 z | | | | | | | | | | | 2.0 | | | | | | | | | | | | | 2.0 | |
| Razem | | 8 | 49 | 1340 | 720 | 45 | 0 | 0 | 45 | 150 | 0 | 430 | 0 | 88.0 | 36.2 | 47.5 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 5.2 | 14.0 | 150 | 0 | 0 | 0 | 9.4 | 15 | 0 | 75 | 0 | 0 | 0 | 7.6 | 17.0 | 165 | 15 | 0 | 0 | 11.1 | 75 | 0 | 135 | 0 | 0 | 0 | 10.7 | 24.0 | 135 | 0 | 0 | 45 | 13.3 | 30 | 0 | 150 | 0 | 0 | 0 | 10.7 | 24.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| **Moduły/Przedmioty specjalnościowe** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S1IDA2E/1 Wymiana i wymienniki ciepła-1 | 1 | 1 | 45 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 2.5 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 3.0 | | | | | | | 0.0 | 30 w | 15 z | | | 3.0 | | | | | | | 3.0 | | | | | | | | | | | | | 0.0 |
| | S1IDA2E/2 Alternatywne źródła energii | 0 | 2 | 45 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 2.5 | | | | | 0.0 | | | | | | | 0.0 | | | | | | | 4.0 | | | | | | | 0.0 | 30 z | 15 z | | | | | | | | | | 4.0 | | | | | | | | | | | | | 4.0 |
| Razem | | 1 | 3 | 90 | 60 | 30 | 0 | 0 | 0 | 0 | 0 | 7.0 | 0.0 | 5.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 7.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 30 | 15 | 0 | 0 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 30 | 15 | 0 | 0 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 3.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 30 | 15 | 0 | 0 | 4.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 4.0 |
| **Moduły/Przedmioty obieralne** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1 | A00-1 PHS-Socjologia gospodarki | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 2.0 | 30 z | | | | 2.0 | | | | | | | 2.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | A00-2 PHS - Etyka w biznesie | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 2.0 | 30 z | | | | 2.0 | | | | | | | 2.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | A00-3 PHS - Wybrane zagadnienia etyki i filozofii | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 2.0 | 30 z | | | | 2.0 | | | | | | | 2.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| 2 1 | A00-1 WZK - Muzyka | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | 15 z | | | | 1.0 | | | | | | | 1.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | A00-2 WZK - Teatr | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | 15 z | | | | 1.0 | | | | | | | 1.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| | A00-3 WZK - Historia sztuki, kultury i ceramoznawstwa | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | 15 z | | | | 1.0 | | | | | | | 1.0 | 0.0 | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 | | | | | | | | | | | | | 0.0 |
| 3 1 | A00-1 Ochrona własności przemysłowej | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 

**Wydział Budownictwa i Architektury**

Nazwa kierunku studiów: **Inżynieria środowiska**
Obszar/obszary kształcenia: **nauki techniczne, studia inżynierskie**
Profil kształcenia: **ogólnoakademicki**
Forma studiów: **stacjonarna**
Poziom kształcenia: **pierwszy**
Specjalność/specjalizacja: **Oprzewnictwo i Wentylacja**
Kod planu studiów: **IS 1A S 2017 2018 Z -**

Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Rok akademicki: 2017/2018
Obowiązuje od: 2017-10-01
Uchwała Rady Wydziału nr: 92/2016/2017, z dn. 2017-05-17

## Plan Studiów

| Semestr | Moduł / przedmiot | Liczba godzin W | A | L | P | Forma zajęć L | LK | P | PD | PR | SD | Suma ECTS | Punkty przy ECTS | Kryterium ECTS | I RGK I semestr Zajęcia wyk. W | A | L | P | ECTS | Zajęcia prakt. L | LK | P | PD | PR | SD | ECTS | I semestr ECTS | II RGK II semestr Zajęcia wyk. W | A | L | P | ECTS | Zajęcia prakt. L | LK | P | PD | PR | SD | ECTS | II semestr ECTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Moduły/Przedmioty kształcenia ogólnego** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 1 | Blok obieralny 1 | 0 | 1 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 2.0 | 30 z | | | | 2.0 | | | | | | | 2.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| 2 1 | Blok obieralny 2 | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | 15 z | | | | 1.0 | | | | | | | 1.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IA003 Technologia informacyjna | 0 | 2 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | 15 z | | | | | | 0.8 | 1.2 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| 3 1 | Blok obieralny 3 | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | | | | | 0.0 | 15 z | | | | 1.0 | | | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IA04 Podstawy CAD | 0 | 2 | 45 | 15 | 0 | 0 | 30 | 0 | 0 | 0 | 3.0 | 2.0 | 1.5 | 15 z | | | | 1.0 | 30 z | | | | 2.0 | 3.0 | | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IA05-1 Wychowanie fizyczne-1 | 0 | 1 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IA05-2 Wychowanie fizyczne-2 | 0 | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 1.0 | | | | | 0.0 | 15 z | | | | 1.0 | | | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IA06 Zagadnienia bezpieczeństwa pracy | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 0.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | 30 z | | | | 1.0 | | 1.0 | 1.0 |
| 4 1 | Blok obieralny 4 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 3.0 | 3.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| 5 1 | Blok obieralny 5 | 0 | 1 | 60 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 4.0 | 4.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | 30 z | | | | 3.0 | | 3.0 | 3.0 |
| 6 1 | Blok obieralny 6 | 0 | 1 | 60 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 4.0 | 4.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | 60 z | | | | 4.0 | | 4.0 | 4.0 |
| 7 1 | Blok obieralny 7 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 2.0 | 2.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IA09-1 Praca dyplomowa | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15.0 | 15.0 | 15.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | Razem | 1 | 14 | 375 | 105 | 45 | 0 | 0 | 45 | 150 | 0 | 30 | 30.0 | 30.0 | 60 | 0 | 0 | 0 | 30.0 | 30.0 | 0 | 0 | 0 | 0 | 0 | 30.0 | 30.0 | 0 | 0 | 0 | 0 | 30.0 | 0 | 0 | 0 | 0 | 0 | 0 | 30.0 | 30.0 |
| | **Moduły/Przedmioty kształcenia podstawowego** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S1IB101-1 Matematyka-1 | 1 | 1 | 30 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 7.0 | 0.0 | 3.0 | 45 z | 45 z | | | 7.0 | | | | | | | 7.0 | 7.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB101-2 Matematyka-2 | 1 | 1 | 30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.0 | | | | | 3.0 | | | | | | | 0.0 | 3.0 | | | | | 0.0 | 15 a | 15 z | | | | | 0.0 | 0.0 |
| | S1IB102 Fizyka | 1 | 1 | 60 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 5.0 | 3.0 | 2.0 | 30 z | | | | 2.0 | 30 z | | | | 3.0 | 5.0 | | 5.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB03 Biologia i ekologia | 1 | 1 | 60 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 4.0 | 2.0 | 2.0 | 30 z | | | | 2.0 | 30 z | | | | 2.0 | 4.0 | | 4.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB04 Geologia | 0 | 2 | 60 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 2.0 | 2.0 | 1.0 | 30 z | | | | 2.0 | 30 z | | | | 2.0 | 4.0 | | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB05 Rysunek techniczny | 0 | 1 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 1.0 | 1.0 | 0.5 | | | | | 1.0 | 15 z | | | | | | 1.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB06 Geologia | 0 | 2 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 3.0 | 1.5 | 2.0 | 15 z | | | | 1.5 | 15 z | | | | 1.5 | 3.0 | | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB07 Chemia | 1 | 1 | 60 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 6.0 | 3.0 | 2.0 | | | | | 0.0 | 30 a | | | | 3.0 | 30 z | | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB08 Geometria wykreślna | 1 | 1 | 45 | 15 | 30 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 1.5 | | | | | 4.0 | 15 a | 30 z | | | 4.0 | | | 4.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB09-1 Hydrologia i gospodarka wodna-1 | 0 | 2 | 45 | 30 | 0 | 0 | 15 | 0 | 0 | 0 | 3.0 | 1.0 | 1.5 | | | | | 1.0 | 30 z | | | | 2.0 | 3.0 | | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB09-2 Hydrologia i gospodarka wodna-2 | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 2.0 | 1.0 | 2.0 | | | | | 0.0 | 15 z | | | | 1.0 | | 1.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB10-1 Metody komputerowe w ITS-1 | 0 | 1 | 45 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 2.0 | | | | | | | 2.0 | 2.0 | | | | | 0.0 | 45 z | 2.0 | | | | | 0.0 | 0.0 |
| | S1IB10-2 Metody komputerowe w ITS-2 | 0 | 1 | 45 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | | | | | 0.0 | | | 45 z | 2.0 | | | 2.0 | 2.0 |
| | S1IB11 Mechanika i wytrzymałość materiałów | 1 | 1 | 60 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 2.0 | | | | | 4.0 | 30 a | 30 z | | | 4.0 | | | 4.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB12-1 Podstawy termodynamiki technicznej-1 | 0 | 2 | 60 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 5.0 | 3.0 | 2.0 | | | | | 3.0 | 30 z | | | | 2.0 | 5.0 | | 5.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB12-2 Podstawy termodynamiki technicznej-2 | 1 | 0 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.0 | | | | | 3.0 | 30 a | | | | 3.0 | | | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB13 Materiałoznawstwo | 0 | 2 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 3.0 | 1.5 | 1.0 | | | | | 1.5 | 15 z | | | | 1.5 | 3.0 | | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB14-1 Mechanika płynów-1 | 1 | 2 | 60 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 5.0 | 1.4 | 2.0 | | | | | 0.0 | 30 a | 15 z | | | 3.0 | 15 z | | 1.4 | 5.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB14-2 Mechanika płynów-2 | 1 | 1 | 30 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 3.0 | | | | | 0.0 | 15 a | 15 z | | | | | 0.0 | 0.0 |
| | S1IB15 Materiały budowlane | 0 | 1 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0.0 | 0.0 | | | | | 0.0 | 15 z | | | | 1.0 | | | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB16 Podstawy budownictwa | 1 | 1 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 4.0 | 1.5 | 1.5 | | | | | 0.0 | 30 a | | | | 2.5 | | 15 z | 1.5 | 4.0 | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IB17 Podstawy ochrony środowiska | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 2.0 | 30 z | | | | 2.0 | | | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | Razem | 11 | 28 | 975 | 480 | 150 | 90 | 0 | 0 | 225 | 0 | 30 | 0 | 0 | 76.0 | 21.9 | 30.0 | 150 | 45 | 0 | 0 | 14.5 | 120 | 0 | 0 | 0 | 0 | 9.5 | 24.4 | 185 | 75 | 0 | 0 | 19.5 | 90 | 0 | 0 | 0 | 0 | 8.5 | 28.0 | 90 | 15 | 0 | 0 | 8.8 | 15 | 0 | 15 | 0 | 0 | 0 | 2.4 | 11.0 | 75 | 15 | 0 | 0 | 7.5 | 0 | 0 | 15 | 0 | 0 | 0 | 1.5 | 9.0 | 0 | 0 | 45 | 0 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 2.0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 45 | 0 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| | **Moduły/Przedmioty kształcenia kierunkowego** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 1 | Blok obieralny 8 | 1 | 1 | 45 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 4.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC01 Pompy wentylatory i sprężarki | 1 | 1 | 45 | 30 | 0 | 0 | 15 | 0 | 0 | 0 | 4.0 | 1.7 | 1.5 | | | | | 0.0 | 30 a | | | | 2.3 | 15 z | | 1.7 | 4.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC03-1 Sieci i instal wod.-kan. c.w.u. i gazu-1 | 1 | 2 | 60 | 15 | 0 | 0 | 45 | 0 | 0 | 0 | 4.0 | 3.5 | 2.0 | | | | | 0.0 | 15 z | | | 45 z | | | 0.0 | 2.5 | 4.0 | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC03-2 Sieci i instal wod.-kan. c.w.u. i gazu-2 | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 1.5 | 3.0 | | | | 0.0 | 30 z | | 1.5 | | 15 z | | 1.5 | 3.0 |
| | S1IC04 Systemy informacji przedsiębiorstw | 0 | 2 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 3.0 | 1.0 | 1.5 | | | | | 0.0 | 15 z | | | | 1.0 | 15 z | | 1.0 | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC05 Mechanika gruntów i geotechnika | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 1.5 | | | | | 0.0 | 30 z | | | | 1.5 | | 15 z | 1.5 | 3.0 | | | | 0.0 | 30 z | | | | | | 0.0 | 0.0 |
| | S1IC06-1 Ogrzewnictwo-1 | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | 30 z | | | | 2.0 | | | 2.0 | 3.0 | | | | 0.0 | 30 z | | | | | | 0.0 | 0.0 |
| | S1IC06-2 Ogrzewnictwo-2 | 1 | 2 | 90 | 30 | 0 | 0 | 30 | 0 | 30 | 0 | 3.0 | 2.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 2.0 | | | | | 0.0 | 30 a | | 1.0 | 30 z | | 30 z | 2.0 | 3.0 |
| | S1IC06-3 Ogrzewnictwo-3 | 0 | 2 | 60 | 0 | 0 | 0 | 30 | 0 | 30 | 0 | 3.0 | 3.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 3.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC07-1 Podstawy technologii wody i ścieków-1 | 2 | 0 | 60 | 30 | 0 | 0 | 15 | 0 | 15 | 0 | 5.0 | 2.4 | 2.5 | | | | | 0.0 | 30 a | | | | 2.5 | 15 z | | 2.4 | 5.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC07-2 Podstawy technologii wody i ścieków-2 | 0 | 2 | 45 | 15 | 0 | 0 | 0 | 30 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 1.2 | 2.0 | | | | 0.0 | 15 z | | 0.8 | | 30 z | | 1.2 | 2.0 |
| | S1IC08-1 Wodociągi i kanalizacja-1 | 1 | 2 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 4.0 | 2.2 | 2.0 | | | | | 0.0 | 30 z | | | | 1.8 | | 30 z | 2.2 | 4.0 | | | | 0.0 | | | | | | | 0.0 | 0.0 |
| | S1IC08-2 Wodociągi i kanalizacja-2 | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 1.7 | 2.0 | | | | | 0.0 | 30 a | | | | | | | 1.3 | 3.0 | | | | 0.0 | 30 z | | 1.3 | | 30 z | | 1.7 | 3.0 |
| | S1IC08-3 Wodociągi i kanalizacja-3 | 1 | 1 | 60 | 30 | 0 | 0 | 0 | 30 | 0 | 0 | 3.0 | 1.5 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 1.5 | 3.0 | | | | 0.0 | 30 a | | | 1.5 | | 30 z | 1.5 | 3.0 |
| | S1IC09 Inżynieria ochrony atmosfery | 0 | 2 | 45 | 30 | 15 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 3.0 | | | | 0.0 | 30 z | 15 z | 3.0 | | | | | 3.0 |
| | S1IC02 Wentwacje | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 1.2 | 2.0 | | | | 0.0 | 15 z | | 0.8 | | 15 z | | 1.2 | 2.0 |
| | S1IC01 Podst. uzdat. wody i oczyszcz. ścieków | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.6 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 1.6 | 3.0 | | | | 0.0 | 30 z | | 1.4 | | 15 z | | 1.6 | 3.0 |
| 8 1 | Blok obieralny 9 | 0 | 2 | 45 | 15 | 0 | 0 | 30 | 0 | 0 | 0 | 4.0 | 3.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 3.0 | 4.0 | | | | 0.0 | 15 z | | 1.0 | 30 z | | | 3.0 | 4.0 |
| | S1IC03 Gospodarka odpadami | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 2.0 | 1.2 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 1.2 | 2.0 | | | | 0.0 | 15 z | | 0.8 | | 15 z | | 1.2 | 2.0 |
| | S1IC04 Akustyka w inżynierii środowiska | 0 | 2 | 30 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 2.0 | 1.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 1.0 | 2.0 | | | | 0.0 | 15 z | | 1.0 | 15 z | | | 1.0 | 2.0 |
| | S1IC03 Teoretyczne podstawy ogrzewnictwa i klimatyzacji | 0 | 2 | 45 | 30 | 0 | 0 | 15 | 0 | 0 | 0 | 3.0 | 1.5 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 1.5 | 3.0 | | | | 0.0 | 30 z | | | 2.0 | | 15 z | 1.5 | 3.0 |
| | S1IC04 Wentylacja i klimatyzacja | 1 | 1 | 90 | 45 | 0 | 0 | 0 | 45 | 0 | 0 | 5.0 | 2.7 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 2.7 | 5.0 | | | | 0.0 | 45 a | | | 2.3 | | 45 z | 2.7 | 5.0 |
| | S1IC07 Źródła ciepła-1 | 0 | 2 | 45 | 30 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.0 | 1.5 | | | | | 0.0 | | | | | | | 0.0 | 1.0 | 3.0 | | | | 0.0 | 30 z | | | 2.0 | | 15 z | 1.0 | 3.0 |
| | S1IC08 Podstawy cieplownictwa | 1 | 1 | 90 | 45 | 0 | 0 | 45 | 0 | 0 | 0 | 4.0 | 0.0 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 4.0 | | | | 0.0 | 45 a | | | 45 z | 4.0 | | | 4.0 |
| | S1IC09 Sprzęganie urządzenia sanitarne | 0 | 2 | 30 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 3.0 | 1.5 | 2.0 | | | | | 0.0 | | | | | | | 0.0 | 1.5 | 3.0 | | | | 0.0 | 15 z | | | 1.5 | | 15 z | 1.5 | 3.0 |
| | S1IC00 Dokumentacja hydrot. i pozwol. wodno-prawne | 0 | 1 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.0 | 1.0 | | | | | 0.0 | | | | | | | 0.0 | 0.0 | 2.0 | | | | | | | | | | | 0.0 | 30 z | | | | | | | | | | | | | | | | | | |

**Wydział Budownictwa i Architektury**

Nazwa kierunku studiów: **Inżynieria środowiska**
Obszar/obszary kształcenia: **nauki techniczne, studia inżynierskie**
Profil kształcenia: **ogólnoakademicki**
Forma studiów: **stacjonarna**
Poziom kształcenia: **pierwszy**
Specjalność/specjalizacja: **Wodociągi i Kanalizacja**
Kod planu studiów: **IS_1A_S_2017_2018_Z_-**

Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Rok akademicki: 2017/2018
Obowiązuje od: 2017-10-01
Uchwała Rady Wydziału nr: 92/2016/2017, z dn. 2017-05-17

**Plan Studiów**

| Semestr | Grupa | Moduł / przedmiot | F.Z. | Liczba godzin | | | | | | | | | | | | Suma ECTS | Praktyczne ECTS | Kształcenie ECTS | I ROK | | | | | | | | | | | |