

Politechnika Warszawska

Wydział Budownictwa, Mechaniki i Petrochemii

PLAN STUDIÓW

Studia stacjonarne drugiego stopnia (profil ogólnoakademicki)

Kierunek: Budownictwo

Specjalność: Instalacje budowlane

| Kod modułu kształcenia | Lp. | Nazwa modułu kształcenia | Liczba egzaminów | Liczba zaliczeń | Ogólna liczba godzin | | | | Rozdział zajęć dydaktycznych na semestr | | | | | | | | | | | | | | | Liczba punktów ECTS | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----|--|--|-----------------|----------------------|---------|-----------|-------------|---|---------------------|-----|-----|------|-----------------|-----------------|-----------------|-----------------|---|----------------|----------------|----------------|------|-----------------|---------------------|-----------------|-----------------|-----------------|------|------|-----|------|-------|--|----|---|----|--|----|--|----|--|--|--|--|--|--|--|
| | | | | | Razem | w tym | | | | Semestr I | | | | | II | | | | | III | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Wykłady | Cwiczenia | Laboratoria | Projekty | Tygodni w semestrze | | | | | 15 | | | | | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | W | C | L | P | W | C | L | P | KA _w | KA _c | KA _L | KA _p | KA | W | C | L | P | KA _w | | KA _c | KA _L | KA _p | KA | | | | | | | | | | | | | | | | | | | |
| WS2A_01 | 1 | Matematyka II | 1 | 1 | 90 | 45 | 45 | | | 2 ^E | 2 | | | | 2 | 3 | | | 5 | 1 ^Z | 1 | | | 1 | 2 | | | 3 | | | | | | | | 8 | | | | | | | | | | | |
| WS2A_02 | 2 | Fizyka II | 1 | | 45 | 15 | 30 | | | | | | | | | | | | | 1 ^E | 2 | | | 2 | 2 | | | 4 | | | | | | | 4 | | | | | | | | | | | | |
| WS2A_03 | 3 | Etyczne i ekologiczne problemy w produkcji przemysłowej | 1 | | 30 | 30 | | | | | | | | | | | | | | 2 ^E | | | | 3 | | | | 3 | | | | | | | 3 | | | | | | | | | | | | |
| WS2A_04 | 4 | Przedsiębiorstwo na rynku UE | | 1 | 30 | 30 | | | | | | | | | | | | | | 2 ^Z | | | | 2 | | | | 2 | | | | | | | 2 | | | | | | | | | | | | |
| WS2A_05 | 5 | Przedmiot ogólnowydziałowy do wyboru * | | 1 | 15 | 15 | | | | | | | | | | | | | | 1 ^Z | | | | 1 | | | | 1 | | | | | | | 1 | | | | | | | | | | | | |
| BIS2A_01 | 7 | Angielska terminologia techniczna w budownictwie | | 1 | 30 | | 30 | | | | | | | | | | | | | | 2 ^Z | | | 2 | | | | 2 | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_02 | 8 | Hydraulika stosowana * / Podstawy geotechniki * | | 1 | 30 | 15 | | | 15 | 1 ^Z | | | 1 | 1 | | | | | 1 | 2 | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_03 | 9 | Mechanika gruntów * / Wzmacnianie i stabilizacja podłoża * | 1 | | 30 | 15 | | | 15 | 1 ^E | | | 1 | 2 | | | | | 1 | 3 | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | |
| BIS2A_04 | 10 | Planowanie przestrzenne | | 1 | 30 | 15 | | | 15 | 1 ^Z | | | 1 | 1 | | | | | 1 | 2 | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_05 | 11 | Mechanika i wytrzymałość materiałów II | | 1 | 45 | 30 | | | 15 | 2 ^Z | | | 1 | 2 | | | | | 1 | 3 | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | |
| BIS2A_06 | 12 | Wentylacja i klimatyzacja II | | 1 | 30 | 15 | | | 15 | 1 ^Z | | | 1 | 1 | | | | | 1 | 2 | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_07 | 13 | Sieci i instalacje gazowe II | | 1 | 30 | 15 | | | 15 | 1 ^Z | | | 1 | 2 | | | | | 1 | 3 | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | |
| BIS2A_08 | 14 | Przydomowe oczyszczalnie ścieków * / Lokalne urządzenia do uzdatniania wody * | | 1 | 30 | 15 | | | 15 | 1 ^Z | | | 1 | 1 | | | | | 1 | 2 | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_09 | 15 | Fizyka budowli II * / Procesy wymiany ciepła * | | 1 | 30 | 15 | | | 15 | | | | | | | | | | 1 ^Z | | | 1 | 1 | | | 1 | 2 | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_10 | 16 | Wodociągi i kanalizacja II | | 1 | 45 | 15 | | | 30 | 1 ^Z | | | 2 | 1 | | | | | 2 | 3 | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | |
| BIS2A_11 | 17 | Metody komputerowe w instalacjach budowlanych | | 1 | 45 | 15 | | | 30 | 1 ^Z | | | 2 | 1 | | | | | 2 | 3 | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | |
| BIS2A_12 | 18 | Ogrzewnictwo II | | 1 | 30 | 15 | | | 15 | 1 ^Z | | | 1 | 1 | | | | | 1 | 2 | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_13 | 19 | Niezawodność syst. infrastr. bud. * / Predykcja awaryjności syst. infrastr. bud. * | | 1 | 30 | 15 | | | 15 | | | | | | | | | | | | | | | | | | 1 ^Z | | | 1 | 1 | | | 1 | 2 | 2 | | | | | | | | | | | |
| BIS2A_14 | 20 | Chemia II | 1 | | 30 | 30 | | | | | | | | | | | | | | 2 ^E | | | 2 | | | | 2 | | | | | | | | 2 | | | | | | | | | | | | |
| BIS2A_15 | 21 | Instalacje budowlane | 1 | | 60 | 30 | | | 30 | | | | | | | | | | | 2 ^E | | | 2 | 3 | | 2 | 5 | | | | | | | | 5 | | | | | | | | | | | | |
| BIS2A_16 | 22 | Konstrukcje budowlane | 1 | 1 | 60 | 30 | | | 30 | | | | | | | | | | | 1 ^Z | | 1 | 1 | | 1 | 2 | 1 ^E | | 1 | 2 | | | 1 | 3 | 5 | | | | | | | | | | | | |
| BIS2A_17 | 23 | Zarządz. przedsięwzięciami bud. * /Ekonomika, org. i kier. budową* | 1 | | 45 | 15 | 15 | | 15 | | | | | | | | | | | 1 ^Z | 1 | | 1 | 2 | 1 | 1 | 4 | | | | | | | | 4 | | | | | | | | | | | | |
| BIS2A_18 | 24 | Urządzenia i konstrukcje mechaniczne | | 1 | 30 | 15 | | | 15 | | | | | | | | | | | | | | | | | 1 ^Z | | 1 | 2 | | | 1 | 3 | | 3 | | | | | | | | | | | | |
| BIS2A_19 | 25 | Modernizacja instalacji budowlanych * / Warunki techniczne w budownictwie * | | 1 | 30 | 15 | | | 15 | | | | | | | | | | | | | | | | | 1 ^Z | | 1 | 1 | | | 1 | 2 | | 2 | | | | | | | | | | | | |
| BIS2A_20 | 26 | Seminarium dyplomowe * | | 1 | 30 | | 30 | | | | | | | | | | | | | | | | | | | | 2 ^Z | | | | | 5 | | 5 | 5 | | | | | | | | | | | | |
| BIS2A_21 | 27 | Praca dyplomowa * | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 | 15 | 15 | | | | | | | | | | | | | |
| Liczba punktów ECTS | | | ogółem | | | | | | | | | | | | | | | | | 20 | | 5 | | 0 | | 5 | | 30 | | 6 | | 5 | | 0 | | 19 | | 30 | | 90 | | | | | | | |
| | | | za zajęcia o charakterze praktycznym | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | za pozostałe zajęcia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Razem liczba godzin | | | 7 | 20 | 930 | 465 | 150 | | 315 | 13 | 2 | 0 | 12 | 27 | | | | | 14 | 6 | 0 | 5 | 25 | | | | | 4 | 2 | 0 | 4 | 10 | | | | | | | | | | | | | | | |
| Procentowy udział liczby godzin zajęć dydaktycznych | | | 25,9 | 74,1 | 100 | 50,0 | 16,1 | | 33,9 | 48,1 | 7,4 | 0,0 | 44,4 | 100,0 | | | | | 56,0 | 24,0 | 0,0 | 20,0 | 100,0 | | | | | 39,9 | 20,0 | 0,0 | 40,0 | 100,0 | | | | | | | | | | | | | | | |
| Łączna liczba punktów ECTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oznaczenie: | | | Liczba egzaminów | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E - egzamin | | | Liczba zaliczeń | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z - zaliczenie na podstawie bieżącej kontroli postępów w semestrze | | | Liczba punktów ECTS za zajęcia o charakterze praktycznym | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KA - punkty ECTS | | | Liczba punktów ECTS za moduły kształcenia do wyboru | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * - przedmioty do wyboru | | | Liczba punktów ECTS za zajęcia wymagające bezpośredniego udziału nauczycieli akademickich | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uwagi: | | | Plan studiów opracowany na podstawie planu studiów przyjętego Uchwałą nr 311/2012-2016 RW BMiP PW z dnia 28.06.2016 r. | | | | | | | | | | | | | | | Plan studiów obowiązuje od: | | | | | | | | | | | | | | | Zatwierdzenie: | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | 01.10.2017 r. Uchwała nr 71/2016-2020 RW BMiP PW z dnia 27.06.2017 r. | | | | | | | | | | | | | | | D Z I E W K A N Wydziału Budownictwa, Mechaniki i Petrochemii prof. dr hab. inż. Janusz Zieliński | | | | | | | | | | | | | | |