

FACULTY OF ENGINEERING SCIENCE AND TECHNOLOGY

MSC-PROGRAMME IN PETROLEUM ENGINEERING AND PETROLEUM GEOSCIENCES

Term 1, 2, 3 and 4

PETROLEUM ENGINEERING (MSG1)

| Ex | Subject no. | Subject title | Note | Autumn | | | Spring | | | Cr | Exam | Specialization | | | | | |
|----|-------------|---|------|--------|---|----|--------|---|---|------|------|----------------|---|---|---|--|--|
| | | | | F | Ø | S | F | Ø | S | | | 1 | 2 | 3 | 4 | | |
| | | Compulsory and optional subjects | 1 | | | | | | | | | | | | | | |
| 1h | TPG4145 | RESERVOIR FLUIDS | | 4 | 6 | 2 | | | | 7,5 | x | o | o | v | v | | |
| 1h | TPG4150 | RESERVOIR REC TECHN | | 4 | 4 | 4 | | | | 7,5 | x | o | o | o | o | | |
| 1h | TPG4177 | CARB RESERVOIR CHAR | | 4 | 2 | 6 | | | | 7,5 | x | v | v | v | v | | |
| 1h | TPG4215 | HIGH DEV DRILLING | | 4 | 1 | 7 | | | | 7,5 | x | v | v | o | v | | |
| 1h | TPG4235 | WELL TESTING AC | 2 | 4 | 1 | 7 | | | | 7,5 | x | v | v | v | v | | |
| 1h | TPG5100 | MATH/COMPUTER METHOD | | 2 | 8 | 2 | | | | 7,5 | - | o | o | o | o | | |
| 1h | TPG5120 | PETROPHYSICS BC | 3 | 4 | 2 | 6 | | | | 7,5 | x | v | v | v | v | | |
| 1v | TPG4160 | RESERVOIR SIMULATION | | | | | 4 | 4 | 4 | 7,5 | x | o | v | v | v | | |
| 1v | TPG4180 | PETR PHYS INTERPR AC | 3 | | | | 4 | 2 | 6 | 7,5 | x | v | v | v | o | | |
| 1v | TPG4205 | DRILL TECH PR CONTR | | | | | 3 | 1 | 8 | 7,5 | x | v | v | v | v | | |
| 1v | TPG4220 | DRILLING FLUID | | | | | 3 | 1 | 8 | 7,5 | x | v | v | o | v | | |
| 1v | TPG4225 | FRACTURED RESERVOIR | | | | | 3 | 2 | 7 | 7,5 | x | v | v | v | v | | |
| 1v | TPG4230 | FIELD DEVELOPMENT | | | | | 3 | 2 | 7 | 7,5 | x | v | o | o | o | | |
| 1v | TPG4240 | RESERVOIR EVALUATION | | | | | 3 | 1 | 8 | 7,5 | x | o | v | v | v | | |
| 1v | TPG5110 | PETROLEUM ECONOMICS | | | | | 3 | 2 | 7 | 7,5 | x | v | v | v | v | | |
| | | Compulsory and optional subjects | 4 | | | | | | | | | | | | | | |
| 2h | TPG4185 | FORMATION MECHANICS | | 3 | 3 | 6 | | | | 7,5 | x | v | v | v | v | | |
| 2h | TPG4235 | WELL TESTING AC | 2 | 4 | 1 | 7 | | | | 7,5 | x | v | v | v | v | | |
| 2h | TPG5200 | PET ENG/GEO INT PROJ | | | 5 | 7 | | | | 7,5 | - | v | v | v | v | | |
| | | Specialization courses | 5 | | | | | | | | | | | | | | |
| 2h | TPG4505 | FORM EV-ENG SC | | | | 12 | | | | 7,5 | x | - | - | - | o | | |
| 2h | TPG4515 | PETR PROD SC | | | | 12 | | | | 7,5 | x | - | o | - | - | | |
| 2h | TPG4525 | DRILLING ENG SC | | | | 12 | | | | 7,5 | x | - | - | o | - | | |
| 2h | TPG4535 | RESERVOIR ENG SC | | | | 12 | | | | 7,5 | x | o | - | - | - | | |
| | | Specialization project | 6 | | | | | | | | | | | | | | |
| 2h | TPG4500 | FORM EV-ENG SP | | | | 24 | | | | 15,0 | - | - | - | - | o | | |
| 2h | TPG4510 | PETR PROD SP | | | | 24 | | | | 15,0 | - | - | o | - | - | | |
| 2h | TPG4520 | DRILLING ENG SP | | | | 24 | | | | 15,0 | - | - | - | o | - | | |
| 2h | TPG4530 | RESERVOIR ENG SP | | | | 24 | | | | 15,0 | - | o | - | - | - | | |
| | | Master Thesis | | | | | | | | | | | | | | | |
| 2v | TPG4920 | PETROL ENGINEERING | | | | | | | | 30,0 | | o | o | o | o | | |

o - compulsory subjects

v - optional subjects

Ex 1h = Term 1, Exam Autumn

Ex 1v = Term 2, Exam Spring

Ex 2h = Term 3, Exam Autumn

Ex 2v = Term 4, Master Thesis Spring

- 5) Two optional subjects must be chosen in the autumn semester (1h) in specialization 4. In specialization 1, 2 and 3 one optional subject must be chosen. Three optional subjects must be chosen in the spring semester (1v) in specialization 2. Two subjects must be chosen in specialization 1, 3 and 4.
- 6) Prerequisite: TPG4240 Reservoir Evaluation or and introductory course in well testing.
- 7) TPG4180 requires TPG5120 or equivalent.
- 8) One subject must be chosen in the third semester (2h). In addition to the subjects listed, students can also choose from first semester, Petroleum Engineering and Petroleum Geosciences.
- 9) One specialization course of 7,5 credit points must be chosen.
- 10) Specialization projects must be chosen according to elected specialization.

cont.

Specialization:

1. Reservoir Engineering
2. Petroleum Production
3. Drilling Engineering
4. Formation Evaluation

FACULTY OF ENGINEERING SCIENCE AND TECHNOLOGY

MSC-PROGRAMME IN PETROLEUM ENGINEERING AND PETROLEUM GEOSCIENCES

Term 1, 2, 3 and 4

PETROLEUM GEOSCIENCES (MSG2)

| Ex | Subject no. | Subject title | Note | Autumn | | | Spring | | | Cr | Exam | Specialization | |
|----|-------------|---|------|--------|---|----|--------|---|------|-----|------|----------------|---|
| | | | | F | Ø | S | F | Ø | S | | | 1 | 2 |
| | | Compulsory and optional subjects | | | | | | | | | | | |
| 1h | TGB4160 | PETROLEUM GEOLOGY | 1 | 3 | 2 | 7 | | | 7,5 | x | v | v | |
| 1h | TPG4125 | SEISMIC WAVE PROP | | 4 | 2 | 6 | | | 7,5 | x | o | o | |
| 1h | TPG4150 | RESERVOIR REC TECHN | | 4 | 4 | 4 | | | 7,5 | x | v | v | |
| 1h | TPG4177 | CARB RESERVOIR CHAR | | 4 | 2 | 6 | | | 7,5 | x | v | v | |
| 1h | TPG4185 | FORMATION MECHANICS | | 3 | 3 | 6 | | | 7,5 | x | v | v | |
| 1h | TPG4195 | GRAVIMETR MAGNETOMET | | 4 | 1 | 7 | | | 7,5 | x | v | v | |
| 1h | TPG5100 | MATH/COMPUTER METHOD | | 2 | 8 | 2 | | | 7,5 | - | o | o | |
| 1h | TPG5120 | PETROPHYSICS BC | 2 | 4 | 2 | 6 | | | 7,5 | x | v | v | |
| 1v | TGB4135 | BASIN ANALYSIS | | | | | 2 | 3 | 7 | 7,5 | x | v | v |
| 1v | TGB4170 | DIAGENESIS/RESQUAL | | | | | 2 | 2 | 8 | 7,5 | x | v | v |
| 1v | TPG4120 | ENG/ENVIRONM GEOPHYS | | | | | 2 | 2 | 8 | 7,5 | x | v | v |
| 1v | TPG4130 | SEISMIC INTERPRET | | | | | 2 | 3 | 7 | 7,5 | x | o | o |
| 1v | TPG4170 | RESERVOIR SEISMICS | | | | | 4 | 1 | 7 | 7,5 | x | v | v |
| 1v | TPG4180 | PETR PHYS INTERPR AC | 2 | | | | 4 | 2 | 6 | 7,5 | x | v | v |
| 1v | TPG4240 | RESERVOIR EVALUATION | | | | | 3 | 1 | 8 | 7,5 | x | v | v |
| 1v | TPG5110 | PETROLEUM ECONOMICS | | | | | 3 | 2 | 7 | 7,5 | x | v | v |
| 2h | TPG4190 | SEISMIC DATA | | 3 | 2 | 7 | | | 7,5 | x | o | v | |
| 2h | TPG5200 | PET ENG/GEO INT PROJ | | | 5 | 7 | | | 7,5 | - | - | v | |
| | | Specialization courses | 3 | | | | | | | | | | |
| 2h | TGB4565 | PETR GEOLOGY SC | | | | 12 | | | 7,5 | x | - | o | |
| 2h | TPG4545 | PETR GEOPHYS SC | | | | 12 | | | 7,5 | x | o | - | |
| | | Specialization project | 4 | | | | | | | | | | |
| 2h | TGB4560 | PETR GEOLOGY SP | | | | 24 | | | 15,0 | - | - | o | |
| 2h | TPG4540 | PETR GEOPHYS SP | | | | 24 | | | 15,0 | - | o | - | |
| | | Master Thesis | 5 | | | | | | | | | | |
| 2v | TGB4915 | PETROLEUM GEOSCIENCE | | | | | | | 30,0 | | - | o | |
| 2v | TPG4925 | PETROLEUM GEOSCIENCE | | | | | | | 30,0 | | o | - | |

o - compulsory subjects

v - optional subjects

Ex 1h = Term 1, Exam Autumn

Ex 1v = Term 2, Exam Spring

Ex 2h = Term 3, Exam Autumn

Ex 2v = Term 4, Master Thesis Spring

1) Totally four subjects must be chosen each semester. In addition to the subjects (listed 2h) students can choose from 1h Petroleum Engineering, 1h Petroleum Geosciences and PhD-courses if taught in English.

2) TPG4180 requires TPG5120 or equivalent.

3) One specialization course must be chosen, either one topic of 7,5 cr or two topics of 3,75.

4) Specialization projects must be chosen according to elected specialization.

5) The master thesis must be chosen according to elected specialization.

Specialization:

1. Petroleum Geophysics

2. Petroleum Geology