

FACULTY OF NATURAL SCIENCES AND TECHNOLOGY

MSC-PROGRAMME IN MEDICAL TECHNOLOGY (MSMEDTEK)

Term 1, 2, 3 and 4

No admittance 2014/15

| Ex | Subject no. | Subject title | Note | Cr | Specialization | | | |
|----|-------------|--|------|-----|----------------|---|---|---|
| | | | | | 1 | 2 | 3 | 4 |
| | | Compulsory and optional courses | | | | | | |
| 1h | FY2302 | BIOPHYSICS I | | 7,5 | - | - | - | v |
| 1h | IT3105 | ART INTEL PROGR | | 7,5 | - | v | - | - |
| 1h | MFEL3010 | MED FOR STUD OF NAT | | 7,5 | o | o | o | o |
| 1h | TDT4173 | MACH LEAR/CASE REAS | | 7,5 | - | v | v | - |
| 1h | TDT4175 | INFORM SYSTEMS | 1 | 7,5 | - | v | - | - |
| 1h | TDT4200 | PARALLEL COMPUTING | 1 | 7,5 | - | v | v | - |
| 1h | TDT4210 | HEALTHCARE INFORM | | 7,5 | - | o | v | - |
| 1h | TDT4237 | SOFTWARE SECURITY | | 7,5 | - | v | - | - |
| 1h | TDT4245 | COOPERATION TECHN | | 7,5 | - | v | - | - |
| 1h | TDT4250 | MODEL DRIVEN DEV IS | | 7,5 | - | v | - | - |
| 1h | TDT4287 | ALG FOR BIOINF | | 7,5 | - | v | - | - |
| 1h | TFY4225 | NUCLEAR/RAD PHYS | | 7,5 | - | - | - | o |
| 1h | TFY4265 | BIOPHYSICAL MICROMET | | 7,5 | - | - | - | v |
| 1h | TFY4310 | MOLECULAR BIOPHYSICS | | 7,5 | - | - | - | v |
| 1h | TTK4160 | MEDICAL IMAGING | 1 | 7,5 | o | v | v | - |
| 1h | TTK4170 | MOD/IDENT BIOL SYS | | 7,5 | - | - | - | v |
| 1h | TTT4130 | DIGITAL COMMUN | 1 | 7,5 | v | v | - | - |
| 1h | TTT4135 | MULTIMEDIA SIGNAL PRO | | 7,5 | v | - | - | - |
| 1h | TTT4175 | MARINE ACOUSTICS | | 7,5 | v | - | - | - |
| 1v | - | EXP IN TEAM INT PROJ | | 7,5 | o | o | o | o |
| 1v | DT8112 | RES TOP HEALTH INFO | | 7,5 | - | v | - | - |
| 1v | MOL3019 | APPL BIOINFORMATICS | | 7,5 | - | - | o | - |
| 1v | MOL4010 | BASIC MOL BIOL | 2 | 7,5 | - | - | o | - |
| 1v | TBT4165 | SYST BIOL/BIOL NETW | | 7,5 | - | - | v | - |
| 1v | TDT4215 | WEB INTELLIGENCE | | 7,5 | - | v | - | - |
| 1v | TDT4230 | GRAPH/VISUAL | | 7,5 | - | v | - | - |
| 1v | TDT4240 | SOFTWARE ARCHITECT | | 7,5 | - | v | - | - |
| 1v | TDT4242 | REQUIREMENTS/TESTING | | 7,5 | - | v | - | - |
| 1v | TFY4280 | SIGNAL PROCESSING | | 7,5 | - | - | - | o |
| 1v | TFY4315 | BIOPHYS IONIZ RADIAT | | 7,5 | - | - | - | o |
| 1v | TFY4320 | PHYS MED IMAG | | 7,5 | v | - | v | o |
| 1v | TMA4300 | COMP STAT METHODS | | 7,5 | - | - | v | - |
| 1v | TTK4165 | SIGNAL PROC MED IMAG | | 7,5 | o | - | - | - |
| 1v | TTT4125 | INFO THEORY COD/COMP | | 7,5 | o | - | - | - |
| 1v | TTT4240 | STAT SIGNAL THEORY | | 7,5 | v | - | - | - |

cont.

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|----|-------------|--------------------------------|------|------|----------------|---|---|---|
| | | | | | 1 | 2 | 3 | 4 |
| 2h | DT8119 | CLIN DEC SUPPORT | | 7,5 | - | v | - | - |
| 2h | IT3105 | ART INTEL PROGR | | 7,5 | - | v | - | - |
| 2h | TDT4173 | MACH LEAR/CASE REAS | | 7,5 | - | v | - | - |
| 2h | TDT4200 | PARALLEL COMPUTING | | 7,5 | - | v | - | - |
| 2h | TDT4237 | SOFTWARE SECURITY | | 7,5 | - | v | - | - |
| 2h | TDT4287 | ALGORITHMS BIOINFO | | 7,5 | - | v | o | - |
| 2h | TKT4150 | BIOMECHANICS | | 7,5 | - | - | - | v |
| 2h | TTK4160 | MEDICAL IMAGING | | 7,5 | - | v | - | v |
| 2h | TTT4130 | DIGITAL COMMUN | | 7,5 | - | v | - | - |
| 2h | TTT4135 | MULTIMEDIA SIGNAL PRO | | 7,5 | o | - | - | - |
| | | Specialization courses | 3 | | | | | |
| 2h | TDT4535 | BIOINFORMATICS SC | | 7,5 | - | - | o | - |
| 2h | TDT4545 | HEALTHCARE INFO SC | | 7,5 | - | o | - | - |
| 2h | TFY4505 | BIOPHYSICS SC | | 7,5 | - | - | - | o |
| 2h | TTK4555 | ENG CYBERNETICS SC | 4 | 7,5 | v | - | - | - |
| 2h | TTT4525 | SIGNAL PROC SC | 4 | 7,5 | v | - | - | - |
| | | Specialization projects | | | | | | |
| 2h | TDT4530 | BIOINFORMATICS SP | | 15,0 | - | - | o | - |
| 2h | TDT4540 | HEALTHCARE INFO SP | | 15,0 | - | o | - | - |
| 2h | TFY4500 | BIOPHYSICS SP | | 15,0 | - | - | - | o |
| 2h | TTK4550 | ENG CYBERNETICS SP | 4 | 15,0 | v | - | - | - |
| 2h | TTT4520 | SIGNAL PROC SP | 4 | 15,0 | v | - | - | - |
| | | Master Thesis | | | | | | |
| 2v | TDT4900 | COMPUTER SCIENCE | | 30,0 | - | o | o | - |
| 2v | TFY4910 | BIOPHYSICS | | 30,0 | - | - | - | o |
| 2v | TTK4900 | ENGINEERING CYBERN | 4 | 30,0 | v | - | - | - |
| 2v | TTT4900 | SIGN PROC/COM | 4 | 30,0 | v | - | - | - |

o = compulsory courses

v - optional courses

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

Specialization:

1 Medical Signal Processing and Imaging

2 Healthcare Informatics

3 Bioinformatics

4 Biophysics and Medical Physics

1) The courses are not considered when planning the teaching and examination schedules (for specialization 2).

2) Lectures are held in Norwegian, but PBL exercises and presentations are given in english.

3) Other relevant ordinary subjects may be chosen, if taught in english.

4) Students at specialization Medical Signal Processing and Imaging should choose one of the combinations TTK4550/TTK4555/TTK4900 or TTT4520/TTT4525/TTT4900.