

Faculty of Medicine and Health Sciences  
Master of Science in Biomedical Sciences

Language of instruction: English

Programme version 4

## 1 General Courses 27 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D013626 Laboratory Quality Management and Assurance<br><i>Peter Van Eenoo -- Department of Diagnostic Sciences</i>             | 3    |     | 1   | A:1     | 75    |
| 2  | D012176 Bio-Ethics in Experimental Medicine<br><i>Katya De Groote -- Department of Internal Medicine and Pediatrics</i>        | 3    |     | 1   | A:1     | 75    |
| 3  | A003107 Advanced Academic English<br><i>Geert Jacobs -- Department of Linguistics</i>  | 3    | UKV | 1   | A:1     | 90    |
| 4  | D012528 Cell and Gene Therapy<br><i>Bart Vandekerckhove -- Department of Diagnostic Sciences</i>                               | 4    |     | 1   | A:1     | 120   |
| 5  | D013628 Large Scale Analysis of Biomedical Data<br><i>Katleen De Preter -- Department of Biomolecular Medicine</i>             | 4    |     | 1   | A:1     | 100   |
| 6  | D012527 Good Clinical Practice - Clinical studies<br><i>Sylvie Rottey -- Department off Basic and Applied Medical Sciences</i> | 3    |     | 1   | A:2     | 90    |
| 7  | D013627 Research Proposal Biomedical Sciences<br><i>Steven Goossens -- Department of Diagnostic Sciences</i>                   | 4    |     | 1   | A:2     | 120   |
| 8  | D012514 Medical Seminars<br><i>Tania Maes -- Department of Internal Medicine and Pediatrics</i>                                | 3    |     | 2   | A:J     | 75    |

## 2 Majors 26 credits

### 2.1 Major Nutrition and Metabolism 26 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D012497 Methodology of Nutritional Research<br><i>Bruno Lapauw -- Department of Internal Medicine and Pediatrics</i>           | 5    |     | 1   | A:1     | 150   |
| 2  | D012498 Human Nutrition Science and Pathology<br><i>XAVIER VERHELST -- Department of Internal Medicine and Pediatrics</i>      | 6    |     | 1   | A:2     | 180   |
| 3  | D012496 Method and Device Validation<br><i>Carolien Bonroy -- Department of Diagnostic Sciences</i>                            | 3    |     | 1   | A:2     | 75    |
| 4  | D012504 Public Health Nutrition<br><i>Stefaan De Henauw -- Department of Public Health and Primary Care</i>                    | 3    |     | 1   | A:2     | 90    |
| 5  | D012495 Medical Laboratory Diagnostics<br><i>Peter Van Eenoo -- Department of Diagnostic Sciences</i>                          | 3    |     | 1   | A:2     | 90    |
| 6  | D001877 Food Microbiology and Food Preservation<br><i>Andreja Rajkovic -- Department of Food Technology, Safety and Health</i> | 6    |     | 2   | A:1     | 180   |

### 2.2 Major Neurosciences 26 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D012509 Structural Aspects of the Central Nervous System<br><i>Wim Ceelen -- Department of Human Structure and Repair</i>              | 5    |     | 1   | A:1     | 150   |
| 2  | D012538 Functional Aspects of the Central Nervous System<br><i>Katja Witschas -- Department off Basic and Applied Medical Sciences</i> | 5    |     | 1   | A:2     | 150   |
| 3  | D012511 Neurobiology<br><i>Evelien Carrette -- Department of Head and Skin</i>   | 5    |     | 1   | A:2     | 150   |

|   |         |   |   |   |     |     |
|---|---------|---|---|---|-----|-----|
| 4 | D012512 | Neurogenetics<br><i>Bart Dermaut -- Department of Biomolecular Medicine</i> | 5 | 1 | A:2 | 150 |
| 5 | D012510 | Clinical Neurology<br><i>Kristl Vonck -- Department of Head and Skin</i>    | 6 | 2 | A:1 | 150 |

### 2.3 Major Tissue Engineering and Regenerative Medicine

26 credits

| Nr | Course  | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1  | D012548 Degeneration and Senescence<br><i>Peter Vandenabeele -- Department of Molecular Biology</i>                 | 5    |     | 1   | A:1     | 150   |
| 2  | D012549 Stem Cell Biology and Reprogramming<br><i>BJORN HEINDRYCKX -- Department of Human Structure and Repair</i>  | 4    |     | 1   | A:2     | 120   |
| 3  | D012550 Clinical and Experimental Embryology<br><i>BJORN HEINDRYCKX -- Department of Human Structure and Repair</i> | 3    |     | 1   | A:2     | 90    |
| 4  | D012551 Biomaterials and Biocompatibility<br><i>Ruslan Dmitriev -- Department of Human Structure and Repair</i>     | 8    |     | 1   | A:2     | 240   |
| 5  | D001923 Tissue Engineering<br><i>Ruslan Dmitriev -- Department of Human Structure and Repair</i>                    | 6    |     | 2   | A:1     | 180   |

### 2.4 Major Radiation Sciences

26 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D012508 Radiation Dosimetry and Radioprotection<br><i>Klaus Bacher -- Department of Human Structure and Repair</i>             | 5    |     | 1   | A:1     | 150   |
| 2  | D012506 Radiochemistry and Radiopharmaceuticals<br><i>Filip De Vos -- Department of Pharmaceutical Analysis</i>                | 4    |     | 1   | A:2     | 120   |
| 3  | D012507 Radiotherapy: Technology and Patient Dosimetry<br><i>Werner De Gerssem -- Department of Human Structure and Repair</i> | 6    |     | 1   | A:2     | 150   |
| 4  | D012505 Medical Imaging<br><i>Klaus Bacher -- Department of Human Structure and Repair</i>                                     | 5    |     | 1   | A:2     | 150   |
| 5  | D012563 Radiobiology and Radiopathology<br><i>Ans Baeyens -- Department of Human Structure and Repair</i>                      | 6    |     | 2   | A:1     | 180   |

### 2.5 Major Medical Genetics

26 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D012701 Advanced Human Genetics<br><i>Sofie Symoens -- Department of Biomolecular Medicine</i>                       | 6    |     | 1   | A:2     | 180   |
| 2  | D012490 Cancer Genetics<br><i>Kaat Durinck -- Department of Biomolecular Medicine</i>                                | 5    |     | 1   | A:2     | 150   |
| 3  | D012547 Massively Parallel Sequencing Data-analysis<br><i>Pieter Mestdagh -- Department of Biomolecular Medicine</i> | 3    |     | 1   | A:2     | 75    |
| 4  | D000652 Developmental Genetics and Gene Regulation<br><i>Elfride De Baere -- Department of Biomolecular Medicine</i> | 6    |     | 1   | A:1     | 180   |
| 5  | D000852 Genetical Diagnostics<br><i>Kathleen Claes -- Department of Biomolecular Medicine</i>                        | 6    |     | 2   | A:1     | 180   |

### 2.6 Major Immunity and Infection

26 credits

| Nr | Course  | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1  | D012529 Immunopathology<br><i>Hamida Hammad -- Department of Internal Medicine and Pediatrics</i> | 5    |     | 1   | A:1     | 150   |
| 2  | D012531 Molecular Immunology<br><i>Tom Taghon -- Department of Diagnostic Sciences</i>            | 5    |     | 1   | A:2     | 150   |
| 3  | D012533 Molecular Virology<br><i>Philip Meuleman -- Department of Diagnostic Sciences</i>         | 5    |     | 1   | A:2     | 150   |
| 4  | D012530 Molecular Bacteriology<br><i>Piet Cools -- Department of Diagnostic Sciences</i>          | 5    |     | 1   | A:2     | 150   |
| 5  | D013094 Vaccinology<br><i>Isabel Leroux-Roels -- Department of Diagnostic Sciences</i>            | 6    |     | 2   | A:1     | 180   |

### 2.7 Major Systems Biology

26 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--------|------|-----|-----|---------|-------|
|----|--------|------|-----|-----|---------|-------|

|   |         |   |   |   |     |     |
|---|---------|---|---|---|-----|-----|
| 1 | D012555 | Genomics, Proteomics and Metabolomics<br><i>Kris Gevaert -- Department of Biomolecular Medicine</i>                   | 6 | 1 | A:1 | 180 |
| 2 | D012702 | Advanced Imaging and Image Analysis<br><i>Marleen Van Troys -- Department of Biomolecular Medicine</i>                | 5 | 1 | A:2 | 150 |
| 3 | D012554 | Machine Learning Methods for Biomedical Data<br><i>Sven Degroove -- Department of Biomolecular Medicine</i>           | 5 | 1 | A:2 | 150 |
| 4 | D012539 | Protein Interaction Networks and Medical Applications<br><i>Sven Eyckerman -- Department of Biomolecular Medicine</i> | 4 | 1 | A:2 | 120 |
| 5 | D012184 | Systems Biology<br><i>Kris Gevaert -- Department of Biomolecular Medicine</i>   | 6 | 2 | A:1 | 150 |

## 2.8 Major Cancer

26 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D012491 Proliferation and Survival<br><i>Panagiotis Ntziachristos -- Department of Biomolecular Medicine</i>     | 5    |     | 1   | A:1     | 150   |
| 2  | D012492 Communication and Metastasis<br><i>Olivier De Wever -- Department of Human Structure and Repair</i>      | 5    |     | 1   | A:2     | 150   |
| 3  | D012493 Clinical Aspects of Cancer<br><i>Wim Ceelen -- Department of Human Structure and Repair</i>              | 5    |     | 1   | A:2     | 150   |
| 4  | D012490 Cancer Genetics<br><i>Kaat Durinck -- Department of Biomolecular Medicine</i>                            | 5    |     | 1   | A:2     | 150   |
| 5  | D012494 Precision Medicine in Cancer<br><i>Karim Vermaelen -- Department of Internal Medicine and Pediatrics</i> | 6    |     | 2   | A:1     | 180   |

## 3 Elective Courses

Subscribe to 31 credit units from no less than 2 and no more than 7 modules from the following list. Subject to approval by the faculty.  
Recommended: Students take 8 to 12 ECTS in the first master's year and 19 to 23 ECTS in the second year.

### 3.1 Elective Course List First Master's Year

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D013531 Innovation Management<br><i>Jan Demolder -- Department of Biomolecular Medicine</i>  | 5    |     | 1   | A:2     | 150   |
| 2  | D012577 Pharmacology [nl]<br><i>Lindsey Devisscher -- Department off Basic and Applied Medical Sciences</i>                            | 7    |     | 1   | A:2     | 210   |
| 3  | D013530 Laboratory Animal Science<br><i>Katleen Hermans -- Department of Pathobiology, Pharmacology and Zoological Medicine</i>        | 6    |     | 1   | A:1     | 180   |
| 4  | K001339 Sustainability Thinking [nl]<br><i>Thomas Block -- Department of Political Sciences</i>  | 5    | UKV | 1   | A:J     | 150   |
| 5  | J000443 Pharmacoeconomics [nl]<br><i>Barbara Claus -- Department of Pharmaceutical Analysis</i>  | 3    |     | 1   | A:2     | 90    |
| 6  | H002169 Powerful Learning Environments [nl]<br><i>Bram De Wever -- Department of Educational Studies</i>                               | 6    |     | 1   | A:1     | 180   |
| 7  | C004114 Mathematics: Advanced Techniques [nl]<br><i>Carol Zamfirescu -- Department of Mathematics, Computer Science and Statistics</i> | 6    |     | 1   | A:2     | 180   |
| 8  | C004223 Nuclear Physics<br><i>Natalie Jachowicz -- Department of Physics and Astronomy</i>   | 4    |     | 1   | A:2     | 120   |
| 9  | A005503 Context and Nuance. A Critical Reflection on Current Topics [nl]<br><i>Stef Craps -- Department of Literary Studies</i>        | 6    | UKV | 1   | A:1     | 180   |
| 10 | D013207 Economic Perspectives on Health<br><i>Lieven Annemans -- Department of Public Health and Primary Care</i>                      | 3    |     | 1   | A:1     | 90    |

### 3.2 Biomedical Researcher in Industry and Management

| Nr | Course  | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1  | D012577 Pharmacology [nl]<br><i>Lindsey Devisscher -- Department off Basic and Applied Medical Sciences</i>         | 7    |     | 2   | A:2     | 210   |
| 2  | J000445 Regulatory Affairs Health Products<br><i>Bart De Spiegeleer -- Department of Pharmaceutical Analysis</i>    | 3    |     | 2   | A:J     | 90    |
| 3  | E092930 Translational Neuroscience<br><i>Christian Vanhove -- Department of Electronics and Information Systems</i> | 3    |     | 2   | A:2     | 90    |

|    |         |   |   |   |     |     |
|----|---------|---|---|---|-----|-----|
| 4  | J000443 | Pharmacoeconomics [nl]<br><i>Barbara Claus -- Department of Pharmaceutical Analysis</i>                                 | 3 | 2 | A:2 | 90  |
| 5  | C002681 | Advanced Programming in Bioinformatics<br><i>Pieter De Bleser -- Department of Molecular Biology</i>                    | 3 | 2 | A:1 | 80  |
| 6  | C003670 | Biomolecular Production Methods<br><i>Leander Meuris -- Department of Biochemistry, Physiology and Microbiology</i>     | 4 | 2 | A:1 | 110 |
| 7  | D013207 | Economic Perspectives on Health<br><i>Lieven Annemans -- Department of Public Health and Primary Care</i>               | 3 | 2 | A:1 | 90  |
| 8  | E076820 | Project Management<br><i>Mario Vanhoucke -- Department of Business Informatics and Operations Management</i>            | 6 | 2 | A:2 | 180 |
| 9  | J000453 | Pharmaceutical Management Skills [nl]<br><i>Bart De Spiegeleer -- Department of Pharmaceutical Analysis</i>             | 3 | 2 | A:2 | 90  |
| 10 | D013530 | Laboratory Animal Science<br><i>Katleen Hermans -- Department of Pathobiology, Pharmacology and Zoological Medicine</i> | 6 | 2 | A:1 | 180 |
| 11 | D013531 | Innovation Management<br><i>Jan Demolder -- Department of Biomolecular Medicine</i>                                     | 5 | 2 | A:2 | 150 |
| 12 | J000427 | Special Nutrition [nl]<br><i>Sarah De Saeger -- Department of Bio-analysis</i>  | 3 | 2 | A:1 | 90  |
| 13 | J000454 | Cutting Edge Technologies for Drug Delivery - Nanomedicines<br><i>Stefaan De Smedt -- Department of Pharmaceutics</i>   | 3 | 2 | A:2 | 90  |

### 3.3 Biomedical Researcher in a Changing Society

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | K001339 Sustainability Thinking [nl]<br><i>Thomas Block -- Department of Political Sciences</i>  | 5    | UKV | 2   | A:J     | 150   |
| 2  | E092930 Translational Neuroscience<br><i>Christian Vanhove -- Department of Electronics and Information Systems</i>                    | 3    |     | 2   | A:2     | 90    |
| 3  | H002000 Modelling of Cognitive Processes<br><i>Tom Verguts -- Department of Experimental Psychology</i>                                | 5    |     | 2   | A:1     | 150   |
| 4  | H001992 Neurobiology of Affective Disorders<br><i>Gilles Pourtois -- Department of Experimental Clinical and Health Psychology</i>     | 4    |     | 2   | A:1     | 120   |
| 5  | B000622 Medical Criminalistics [nl]<br><i>Geert Van Parys -- Department of Diagnostic Sciences</i>                                     | 4    |     | 2   | A:2     | 120   |
| 6  | B001499 Forensic Psychology [nl]<br><i>Lize Verbeke -- Department of Developmental, Personality and Social Psychology</i>              | 4    |     | 2   | A:2     | 120   |
| 7  | K001187 Corporate Communication [nl]<br><i>Veroline Cauberghe -- Department of Communication Sciences</i>                              | 5    |     | 2   | A:2     | 150   |
| 8  | H001977 Coaching and Diversity [nl]<br><i>Elisabeth De Schauwer -- Department of Special Education</i>                                 | 3    | UKV | 2   | A:J     | 90    |
| 9  | A005503 Context and Nuance. A Critical Reflection on Current Topics [nl]<br><i>Stef Craps -- Department of Literary Studies</i>        | 6    | UKV | 2   | A:1     | 180   |
| 10 | H001010 Introduction Industrial Psychology [nl]<br><i>Bart Wille -- Department of Developmental, Personality and Social Psychology</i> | 5    |     | 2   | Z:1     | 150   |
| 11 | B001497 Forensic Psychiatry [nl]<br><i>Kurt Audenaert -- Department of Head and Skin</i>   | 4    |     | 2   | B:1     | 120   |
| 12 | B001637 Drug Phenomena [nl]<br><i>Louis Favril -- Department of Criminology, Criminal Law and Social Law</i>                           | 5    |     | 2   | A:1     | 150   |
| 13 | H002429 Neuropsychology [nl]<br><i>Wim Fias -- Department of Experimental Psychology</i>   | 5    |     | 2   | A:2     | 150   |

### 3.4 Biomedical Exploration: Major Courses

| Nr | Course  | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1  | D012498 Human Nutrition Science and Pathology<br><i>XAVIER VERHELST -- Department of Internal Medicine and Pediatrics</i> | 6    |     |     | A:2     | 180   |
| 2  | D012496 Method and Device Validation<br><i>Carolien Bonroy -- Department of Diagnostic Sciences</i>                       | 3    |     |     | A:2     | 75    |
| 3  | D012504 Public Health Nutrition<br><i>Stefaan De Henauw -- Department of Public Health and Primary Care</i>               | 3    |     |     | A:2     | 90    |

|    |         |  |   |     |     |
|----|---------|--|---|-----|-----|
| 4  | D012495 | Medical Laboratory Diagnostics<br><i>Peter Van Eenoo -- Department of Diagnostic Sciences</i>                                  | 3 | A:2 | 90  |
| 5  | D012497 | Methodology of Nutritional Research<br><i>Bruno Lapauw -- Department of Internal Medicine and Pediatrics</i>                   | 5 | A:1 | 150 |
| 6  | D012509 | Structural Aspects of the Central Nervous System<br><i>Wim Ceelen -- Department of Human Structure and Repair</i>              | 5 | A:1 | 150 |
| 7  | D012538 | Functional Aspects of the Central Nervous System<br><i>Katja Witschas -- Department off Basic and Applied Medical Sciences</i> | 5 | A:2 | 150 |
| 8  | D012511 | Neurobiology<br><i>Evelien Carrette -- Department of Head and Skin</i>   | 5 | A:2 | 150 |
| 9  | D012512 | Neurogenetics<br><i>Bart Dermaut -- Department of Biomolecular Medicine</i>  | 5 | A:2 | 150 |
| 10 | D012549 | Stem Cell Biology and Reprogramming<br><i>BJORN HEINDRYCKX -- Department of Human Structure and Repair</i>                     | 4 | A:2 | 120 |
| 11 | D012550 | Clinical and Experimental Embryology<br><i>BJORN HEINDRYCKX -- Department of Human Structure and Repair</i>                    | 3 | A:2 | 90  |
| 12 | D012548 | Degeneration and Senescence<br><i>Peter Vandenabeele -- Department of Molecular Biology</i>                                    | 5 | A:1 | 150 |
| 13 | D012551 | Biomaterials and Biocompatibility<br><i>Ruslan Dmitriev -- Department of Human Structure and Repair</i>                        | 8 | A:2 | 240 |
| 14 | D012506 | Radiochemistry and Radiopharmaceuticals<br><i>Filip De Vos -- Department of Pharmaceutical Analysis</i>                        | 4 | A:2 | 120 |
| 15 | D012508 | Radiation Dosimetry and Radioprotection<br><i>Klaus Bacher -- Department of Human Structure and Repair</i>                     | 5 | A:1 | 150 |
| 16 | D012507 | Radiotherapy: Technology and Patient Dosimetry<br><i>Werner De Gerssem -- Department of Human Structure and Repair</i>         | 6 | A:2 | 150 |
| 17 | D012505 | Medical Imaging<br><i>Klaus Bacher -- Department of Human Structure and Repair</i>   | 5 | A:2 | 150 |
| 18 | D012490 | Cancer Genetics<br><i>Kaat Durinck -- Department of Biomolecular Medicine</i>  | 5 | A:2 | 150 |
| 19 | D012547 | Massively Parallel Sequencing Data-analysis<br><i>Pieter Mestdagh -- Department of Biomolecular Medicine</i>                   | 3 | A:2 | 75  |
| 20 | D000652 | Developmental Genetics and Gene Regulation<br><i>Elfride De Baere -- Department of Biomolecular Medicine</i>                   | 6 | A:1 | 180 |
| 21 | D012701 | Advanced Human Genetics<br><i>Sofie Symoens -- Department of Biomolecular Medicine</i>   | 6 | A:2 | 180 |
| 22 | D012531 | Molecular Immunology<br><i>Tom Taghon -- Department of Diagnostic Sciences</i>   | 5 | A:2 | 150 |
| 23 | D012533 | Molecular Virology<br><i>Philip Meuleman -- Department of Diagnostic Sciences</i>  | 5 | A:2 | 150 |
| 24 | D012530 | Molecular Bacteriology<br><i>Piet Cools -- Department of Diagnostic Sciences</i>   | 5 | A:2 | 150 |
| 25 | D012529 | Immunopathology<br><i>Hamida Hammad -- Department of Internal Medicine and Pediatrics</i>                                      | 5 | A:1 | 150 |
| 26 | D012702 | Advanced Imaging and Image Analysis<br><i>Marleen Van Troys -- Department of Biomolecular Medicine</i>                         | 5 | A:2 | 150 |
| 27 | D012554 | Machine Learning Methods for Biomedical Data<br><i>Sven Degroeve -- Department of Biomolecular Medicine</i>                    | 5 | A:2 | 150 |
| 28 | D012539 | Protein Interaction Networks and Medical Applications<br><i>Sven Eyckerman -- Department of Biomolecular Medicine</i>          | 4 | A:2 | 120 |
| 29 | D012555 | Genomics, Proteomics and Metabolomics<br><i>Kris Gevaert -- Department of Biomolecular Medicine</i>                            | 6 | A:1 | 180 |
| 30 | D012491 | Proliferation and Survival<br><i>Panagiotis Ntziachristos -- Department of Biomolecular Medicine</i>                           | 5 | A:1 | 150 |
| 31 | D012492 | Communication and Metastasis<br><i>Olivier De Wever -- Department of Human Structure and Repair</i>                            | 5 | A:2 | 150 |
| 32 | D012493 | Clinical Aspects of Cancer<br><i>Wim Ceelen -- Department of Human Structure and Repair</i>                                    | 5 | A:2 | 150 |

|    |         |  |   |  |     |     |
|----|---------|--|---|--|-----|-----|
| 33 | D012490 | Cancer Genetics<br><i>Kaat Durinck -- Department of Biomolecular Medicine</i>  | 5 |  | A:2 | 150 |
| 34 | D001877 | Food Microbiology and Food Preservation<br><i>Andreja Rajkovic -- Department of Food Technology, Safety and Health</i> | 6 |  | A:1 | 180 |
| 35 | D012510 | Clinical Neurology<br><i>Kristl Vonck -- Department of Head and Skin</i>   | 6 |  | A:1 | 150 |
| 36 | D001923 | Tissue Engineering<br><i>Ruslan Dmitriev -- Department of Human Structure and Repair</i>                               | 6 |  | A:1 | 180 |
| 37 | D012563 | Radiobiology and Radiopathology<br><i>Ans Baeyens -- Department of Human Structure and Repair</i>                      | 6 |  | A:1 | 180 |

### 3.5 Preparing for EduMa

| Nr | Course  | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1  | H002285 Reference Internship: Health Sciences [nl]<br><i>Leen Haerens -- Department of Movement and Sports Sciences</i>           | 3    |     | 2   | A:J     | 90    |
| 2  | H002169 Powerful Learning Environments [nl]<br><i>Bram De Wever -- Department of Educational Studies</i>                          | 6    |     | 2   | A:1     | 180   |
| 3  | H002426 General Teaching Methodology in Health Sciences [nl]<br><i>Leen Haerens -- Department of Movement and Sports Sciences</i> | 6    |     | 2   | A:1     | 180   |
| 4  | H002197 The Teacher within School and Society [nl]<br><i>Melissa Tuytens -- Department of Educational Studies</i>                 | 4    |     | 2   | A:1     | 120   |
| 5  | H002169 Powerful Learning Environments [nl]<br><i>Bram De Wever -- Department of Educational Studies</i>                          | 6    |     | 2   | A:1     | 180   |
| 6  | H002198 Psychology of Adolescence [nl]<br><i>Wim Beyers -- Department of Developmental, Personality and Social Psychology</i>     | 4    |     | 2   | A:1     | 120   |
| 7  | H002196 Classroom Management and Reflection<br><i>Melissa Tuytens -- Department of Educational Studies</i>                        | 4    |     | 2   |         | 120   |

### 3.6 Medical Radiation Physics

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | C004114 Mathematics: Advanced Techniques [nl]<br><i>Carol Zamfirescu -- Department of Mathematics, Computer Science and Statistics</i> | 6    |     | 2   | A:2     | 180   |
| 2  | C004212 Python for Scientists<br><i>Toon Verstraelen -- Department of Physics and Astronomy</i>  | 5    |     | 2   | A:1     | 150   |
| 3  | C004223 Nuclear Physics<br><i>Natalie Jachowicz -- Department of Physics and Astronomy</i>   | 4    |     | 2   | A:2     | 120   |
| 4  | D002433 Detection and Measurement of Ionizing Radiation [nl]<br><i>Klaus Bacher -- Department of Human Structure and Repair</i>        | 3    |     | 2   | A:1     | 90    |
| 5  | D013254 Radiation Protection, Safety and Legislation [nl]<br><i>Klaus Bacher -- Department of Human Structure and Repair</i>           | 5    |     | 2   | A:J     | 150   |

### 3.7 Elective Courses: Free Choice

6 credits

Subscribe to no more than 6 credit units from the study programmes of Ghent University, including the Ghent University Elective Courses. Subject to approval by the faculty.  
The maximum number of 6 ECTS credits for elective courses that can be freely chosen may be exceeded to a maximum of 12 ECTS credits, only for number of courses in support of the master's thesis or major. Moreover, the request to take more than 6 SP of free electives needs to be motivated on behalf of the curriculum committee, who will give its final approval, for all the included free electives within the package of maximal 12 SP.

[Ghent University Elective Courses](#)

## 4 Work Placement 6 credits

| Nr | Course   | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1  | D013637 Major Internship Biomedical Sciences<br><i>Kaat Durinck -- Department of Biomolecular Medicine</i> | 6    |     | 1   | A:J     | 180   |

## 5 Master's Dissertation 30 credits

| Nr | Course                        | CRDT | Ref | MT1 | Session | Study |
|----|-------------------------------|------|-----|-----|---------|-------|
| 1  | D012185 Master's Dissertation | 30   |     | 2   | A:J     | 900   |

## Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the course name, using the following ISO codes:

|               |             |             |               |                |                      |             |
|---------------|-------------|-------------|---------------|----------------|----------------------|-------------|
| bg: Bulgarian | de: German  | es: Spanish | ja: Japanese  | pl: Polish     | sh: Croatian/Serbian | zh: Chinese |
| cs: Czech     | el: Greek   | fr: French  | nl: Dutch     | pt: Portuguese | sl: Slovene          |             |
| da: Danish    | en: English | it: Italian | no: Norwegian | ru: Russian    | sv: Swedish          |             |

## Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2. When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course is not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

|                 |                                 |                                 |                                 |
|-----------------|---------------------------------|---------------------------------|---------------------------------|
| a: bi-annually  | c: annually, from 2024-2025     | f: annually, from 2025-2026     | i: annually, from 2026-2027     |
| b: tri-annually | d: bi-annually, from 2024-2025  | g: bi-annually, from 2025-2026  | j: bi-annually, from 2026-2027  |
|                 | e: tri-annually, from 2024-2025 | h: tri-annually, from 2025-2026 | k: tri-annually, from 2026-2027 |