## Cycle view of the study programme

| | | Bl | Or | Th | Pr | Au | Cr |
|---|---|---|---|---|---|---|---|
| **Compulsory courses (B1 : 60Cr)** | | | | | | | |
| PHIN2034-1 | *Biotechnologies* | B1 | TA | | | | **7** |
| | *- Concepts and production of protein and oligonucleotide biopharmaceuticals* - David VERMIJLEN | | 15 | - | - | | |
| | *- Living biopharmaceuticals, vaccines and biosecurity* - Véronique FONTAINE | | 6 | - | - | | |
| | *- Managing the risk of the release of cell and genetic products* - Roland MARINI DJANG'EING'A | | 3 | - | - | | |
| | *- Formulation of biopharmaceuticals* - Rita VANBEVER | | 15 | - | - | | |
| | *- Quality control and analytical techniques in biopharmaceuticals, good practice and legal recommendations, part A* - Marianne FILLET | | 5 | - | - | | |
| | *- Quality control and analytical techniques in biopharmaceuticals, good practice and legal recommendations, part B (post-translational modifications)* - Cédric DELPORTE | | 3 | - | - | | |
| | *- From the laboratory to the pharmacy: legal requirements - part a: Patents and industrial protection* - Patrick DI STEFANO | | 5 | - | - | | |
| | *- From the laboratory to the pharmacy: legal requirements - part b: Statutes and regulatory constraints on biological products* - Hugues MALONNE | | 3 | - | - | | |
| | *- From the laboratory to the pharmacy: legal requirements - part c: Procedure for releasing batches and the legal framework of vaccines* - Lorenzo TESOLIN | | 1 | - | - | | |
| | *- From the laboratory to the pharmacy: legal requirements - part d: Organisation of quality assurance* - Thierry PRONCE | | 3 | - | - | | |
| | *- From the laboratory to the pharmacy: legal requirements - part e: Introduction to Biobanking* - Stéphanie GOFFLOT | | 3 | - | - | | |
| PHIN2004-1 | *Active substances* | B1 | TA | | | | **4** |
| | *- Substances issues de recherches pharmacochimiques, part a* | | 10 | - | - | | |
| | *- Substances issues de recherches pharmacochimiques, part b* - François DUFRASNE | | 5 | - | - | | |
| | *- Substances d'origine naturelle, part a* - Joëlle LECLERCQ | | 5 | - | - | | |
| | *- Substances d'origine naturelle, part b* - Caroline STEVIGNY | | 5 | - | - | | |
| | *- Produits radiopharmaceutiques* - Zena WIMANA | | 10 | - | - | | |
| PHIN2008-2 | *Clinical viewpoints* | B1 | TA | | | | **5** |
| | *- Métabolisme des médicaments et paramètres pharmacocinétiques* - FrançoisXavier MATHY | | 20 | - | - | | |
| | *- Aspects théoriques et pratiques des études cliniques (y compris les méthodes statistiques appliquées aux études cliniques)* - Régis RADERMECKER | | 15 | - | - | | |
| | *- Information et pharmacovigilance* - Raphaël DENOOZ | | 10 | - | - | | |
| PHIN2013-2 | *Quality assurance and pharmaceutical management* | B1 | TA | | | | **7** |
| | *- Principles of pharmaceutical management* - JeanMichel VANDERHOFSTADT | | 10 | - | - | | |
| | *- Quality assurance, part a: basic concepts and quality assurance organisation* - Thierry PRONCE | | 18 | - | - | | |
| | *- Quality assurance, part b: analytical technology of procedures and risk analysis* - Xavier MARCELIS | | 10 | - | - | | |
| | *- English applied to the pharmaceutical industry* - Jacques POUPAERT, Nevin SERBEST | | 20 | - | - | | |
| | *- Pharmaceutical marketing* - Vincent BIERLAIRE | | 7,5 | - | - | | |
| PHIN2033-1 | *Pharmaceutical technology* | B1 | TA | | | | **5** |
| | *- Industrial pharmaceutical microbiology* - Véronique FONTAINE | | 9 | - | - | | |
| | *- Preformulation and selection of galenical forms* - Jonathan GOOLE | | 15 | - | - | | |
| | *- Industrial production of galenical forms* - Brigitte EVRARD | | 15 | - | - | | |
| | *- Industrial aspects of technological development including packaging* - Laurence DENIS | | 10 | - | - | | |
| PHIN2023-1 | *Drug analysis* | B1 | TA | | | | **6** |

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|---|---|---|---|---|---|---|---|
| | - *Analytical control practices and pharmaceutical and biopharmaceutical control - part a* - Pierre VAN ANTWERPEN | | 7 | - | - | | |
| | - *Analytical control practices and pharmaceutical and biopharmaceutical control - part b* - Marianne FILLET | | 5 | - | - | | |
| | - *Pharmaceutical and biopharmaceutical analytical methods - Approving and certifying equipment* - Philippe HUBERT, Roland MARINI DJANG'EING'A | | 12 | - | - | | |
| | - *Pharmaceutical and biopharmaceutical analytical methods - Process Analytical Technology* - Eric ZIEMONS | | 5 | - | - | | |
| | - *Statistical methods applied to the pharmaceutical industry* - Laure ELENS | | 15 | - | - | | |
| | - *Experimental planning and quality by design* - Bruno BOULANGER, Pierre LEBRUN | | 10 | - | - | | |
| PHIN2029-2 | *Regulation and the medical-social environment* | B1 | TA | | | | **8** |
| | - *Economic aspects of drug development* - Dominique MARTIN | | 10 | - | - | | |
| | - *Legislation and procedures applied to pharmaceutical industry - part a: Leglislation* - Catherine DRUEZ | | 10 | 5 | - | | |
| | - *Legislation and procedures applied to pharmaceutical industry - part b: Patents and industrial protection* - Patrick DI STEFANO | | 5 | - | - | | |
| | - *Macroeconomic environment and pharmaco-economics* - Hugues MALONNE | | 10 | - | - | | |
| | - *CTD File (Common Technical Document)* - Walid EL AZAB | | 15 | - | - | | |
| | - *Regulations of preclinical and clinical studies: Pharmaceutical toxicological files* - Karen VAN MALDEREN | | 15 | - | - | | |
| | - *Regulations of preclinical and clinical studies: Clinical studies* - Anne LENAERS | | 5 | - | - | | |
| | - *Regulations of preclinical and clinical studies: Pediatric studies* - Thierry SCHURMANS | | 2,5 | - | - | | |
| | - *Specific regulatory issues, part a: medicine and herbal dietary supplement* - Michel FREDERICH | | 5 | - | - | | |
| | - *Specific regulatory aspects, part b: Preformulation and documentation of galenic development* - Francis VANDERBIST | | 5 | - | - | | |
| | - *Belgian and European legislation on clinical trials* | | 5 | - | - | | |
| PHIN2032-1 | *Visits and seminars organised in the pharmaceutical industry* - François DUFRASNE, Marianne FILLET, Joëlle LECLERCQ, Rita VANBEVER - [75h Vis.] | B1 | TA | - | - | [+] | **3** |
| MTFE2000-1 | *End-of-course work carried out during an internship in the pharmaceutical industry or in a university research lab* - François DUFRASNE, Philippe HUBERT, Joëlle LECLERCQ - [12w STCO] | B1 | TA | - | - | [+] | **15** |