

Recommended STUDY PLAN

Two-year follow-up Master's study program **PHARMACEUTICAL SCIENCES 2022/2023**

Compulsory subjects

1st section of the study

| Compulsory subjects | Guarantor | Number of lessons WS | | | Form of control | Number of lessons SS | | | Form of control | Nr. of credits |
|-------------------------------------|-----------------|----------------------|----|----|-----------------|----------------------|----|----|-----------------|----------------|
| | | L | S | P | | L | S | P | | |
| Physical Principles of Dosage Forms | Paraskevopoulos | 28 | 0 | 0 | C+E | | | | | 2 |
| Pharmaceutical Chemistry I | Doležal | 42 | 14 | 56 | C | | | | | 5 |
| Pharmacology I | Štaud | 56 | 42 | 0 | C | | | | | 5 |
| Natural Drugs I | Cahlíková | | | | | 28 | 0 | 28 | C | 3 |
| Pharmaceutical Analysis I | Štěrbová | | | | | 28 | 8 | 34 | C | 3 |
| Dosage Forms I | Šklubalová | | | | | 56 | 0 | 0 | C | 2 |
| Pharmacology II | Štaud | | | | | 56 | 42 | 0 | C+E | 8 |
| Pharmaceutical Chemistry II | Doležal | | | | | 42 | 14 | 0 | C+E | 9 |

2nd section of the study

| Compulsory subjects | Guarantor | Number of lessons WS | | | Form of control | Number of lessons SS | | | Form of control | Nr. of credits |
|----------------------------|------------------|----------------------|----|-----|-----------------|----------------------|---|-----|-----------------|----------------|
| | | L | S | P | | L | S | P | | |
| Pharmaceutical Analysis II | Kučera | 28 | 8 | 34 | C+E | | | | | 7 |
| Natural Drugs II | Cahlíková | 28 | 0 | 56 | C+E | | | | | 7 |
| Dosage Forms II | Šklubalová | 56 | 35 | 0 | C+E | | | | | 8 |
| Advanced Statistics | Duintjer Tebbens | 12 | 10 | 0 | C | | | | | 3 |
| Diploma Thesis | Čečková | 0 | 0 | 252 | C | 0 | 0 | 252 | E | 17 |

Elective subjects

1st section of the study

| Elective subjects | Guarantor | Number of lessons WS | | | Form of control | Number of lessons SS | | | Form of control | Nr. of credits |
|--|-------------|----------------------|----|----|-----------------|----------------------|----|----|-----------------|----------------|
| | | L | S | P | | L | S | P | | |
| Xenobiochemistry | Wsól | 28 | 14 | 0 | C+E | | | | | 3 |
| Biological Drugs | Miletín | 14 | 0 | 0 | E | | | | | 2 |
| Special Methods of Instrumental Analysis (lessons) min. 5 students | Sklenářová | 28 | 0 | 0 | C | | | | | 2 |
| Special Methods of Instrumental Analysis (practical classes) min. 5 students | Sklenářová | 0 | 6 | 36 | C+E | | | | | 4 |
| Pathological Biochemistry for Pharmaceutical Sciences | Boušová | | | | | 28 | 14 | 0 | E | 5 |
| Xenobiochemistry - Practical Training | Wsól | | | | | 0 | 0 | 28 | C | 2 |
| Introduction to Applied Bioinformatics | Matoušková | | | | | 0 | 28 | 0 | C+E | 2 |
| Biotechnology | Siatka | | | | | 28 | 0 | 14 | C+E | 3 |
| Technology of Synthetic Drugs | Doležal | | | | | 28 | 0 | 14 | C+E | 3 |
| Advanced Separation Methods min. 5 students | Nováková L. | | | | | 14 | 14 | 0 | C+E | 3 |
| Immunopharmacology | Jílek | | | | | 28 | 14 | 0 | C+E | 3 |
| Toxicology for Pharmaceutical Sciences | Pourova | | | | | 14 | 0 | 0 | C+E | 2 |
| Molecular Biology and Genetics | Šimůnek | | | | | 42 | 0 | 14 | C+E | 4 |

2nd section of the study

| Elective subjects | Guarantor | Number of lessons WS | | | Form of control | Number of lessons SS | | | Form of control | Nr. of credits |
|--|------------|----------------------|----|----|-----------------|----------------------|----|----|-----------------|----------------|
| | | L | S | P | | L | S | P | | |
| Basics of Molecular Modelling of Drugs | Zitko | 14 | 14 | 0 | C+E | | | | | 3 |
| Gene Therapy | Miletín | 14 | 14 | 0 | C+E | | | | | 2 |
| Bioanalysis of Drugs | Kučera | 28 | 12 | 16 | C+E | | | | | 5 |
| Industrial Production of Pharmaceutical Preparations (CL=5) | Šklubalová | | | | | 10 | 10 | 40 | C+E | 4 |
| Selected Methods of Pharmaceutical Technology (CL=5) | Mužíková | | | | | 0 | 14 | 28 | C+E | 4 |
| Current Strategies in Pharmacotherapy | Červený | 14 | 0 | 0 | E | | | | | 2 |
| Development of Pharmaceutical Products CL=5 | Šklubalová | 0 | 32 | 0 | C+E | | | | | 4 |
| Current Trends in the Development of Chemical Drugs | Kučerová | | | | | 14 | 0 | 0 | C | 1 |
| Advanced Pharmaceutical Analysis (since the academic year 2023/2024) | Kučera | | | | | 14 | 16 | 12 | C+E | 4 |
| Technology of Natural Drugs | Hulcová | | | | | 28 | 0 | 14 | C+E | 3 |
| Experimental Pharmacodynamics | Carazo | | | | | 14 | 0 | 28 | C+E | 3 |
| Pharmacokinetics | Hofman | | | | | 14 | 0 | 14 | C+E | 3 |

Optional subjects

| Optional subjects | Guarantor | Number of lessons WS | | | Form of control | Number of lessons SS | | | Form of control | Nr. of credits | Recommended year |
|---|-----------|----------------------|----|----|-----------------|----------------------|----|----|-----------------|----------------|------------------|
| | | L | S | P | | L | S | P | | | |
| Physical Training and Sports I | Bezouška | 0 | 0 | 28 | C | 0 | 0 | 28 | C | 2 | 1 |
| Research Project | Štaud | | | | C | | | | C | 6 | 1 |
| Toxicity of Natural Compounds | Chlebek | | | | | 42 | 0 | 0 | C+E | 3 | 2 |
| Pathological Physiology for Pharmacists | Nachtigal | | | | | 42 | 28 | 0 | C+E | 7 | 1 |
| Radiopharmacy | Trejtnar | 28 | 14 | 14 | E | | | | | 4 | 2 |
| Phytopharmaceuticals and Nutraceuticals | Šafratová | 28 | 0 | 0 | E | | | | | 3 | 2 |

Conditions of FSE

| Parts of FSE | Conditions for taking parts of FSE | Recommended Section of Study |
|----------------------------------|------------------------------------|------------------------------|
| FSE 1 - Pharmaceutical Chemistry | Pharmaceutical Chemistry II - exam | 1 SS |
| FSE 2 - Pharmacology | Pharmacology II - exam | 1SS |
| FSE 3 - Dosage Forms | Dosage Forms II - exam | 2WS |
| FSE 4 - Pharmaceutical Analysis | Pharmaceutical Analysis II - exam | 2WS |
| FSE 5 - Natural Drugs | Natural Drugs II - exam | 2WS |
| FSE - Diploma Thesis Defence | 120 credits, FSE 1-5 | 2SS |