

**University of South Bohemia in České Budějovice**  
**Faculty of Science**

**Individual Study Plan in Doctoral Study Programme**  
**Applied Physics**

**Student:**.....  
*(first name, surname, title)*

**Date of start of study:** .....

**Department:** of Physics

**Supervisor:** .....  
*(first name, surname, title, for external supervisor, name and address of workplace, telephone, email)*

**Faculty of Science guarantor:**

.....  
*(first name, surname, title, department – assigned only in the case of an external supervisor; he/she is responsible for administrative tasks in connection with the study)*

**Supervisor-specialist, consultant:**.....  
*(first name, surname, title, for external supervisor, name and address of workplace, telephone, email)*

**Title of dissertation:**

**Date and location of submission:** .....

**Student's Signature:** .....

**Supervisor's Signature:** .....

**Guarantor's Signature (if assigned):** .....

**Workplace of AS CR cooperating in the tuition of the doctoral student:**

.....  
**Approval of director of institute of AS CR (if he/she has not already done it in the admission protocol):**

Date.....

Signature.....

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**Discussed and approved by the specialist board on:**

**Name and signature of the specialist board's chair:**

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**List of Mandatory courses** (the expected year/semester of completion is given in parentheses):

UFY/806 Literature review (1./2.)

UFY/800 Doctor's Thesis, Practical Part (every semester)

UFY/805 Doctoral methodological seminar (every year)

OJZ/940 TOEFL ITP for Doctoral Students – Examination (must precede the OJZ/950 course)\*

OJZ/950 Doctor's English Examination (must be completed by the end of the standard period of study)\*

FBI/801 Study stay I

FBI/802 Study stay II

FBI/803 Study stay III

} minimum duration 1 month  
(at any time during the study)

UFY/907 Conference Presentation -in foreign language (at any time during the study)

FBI/D1 State Doctoral Examination (the latest date, including any re-examination, is the standard study period plus one year)

**Elective courses** (at least three must be selected here, remove other courses):

Advanced plasma sources: properties and applications

Advanced simulations in many body physics

Applied thermodynamics of fluids

Charge transfer processes and their simulations

Computational physics – fluid modeling

Density functional theory (DFT) and its applications

Diagnostics of surfaces and materials

Finite element method

Laser physics

Nonlinear optics

On-line course

Physics of active surfaces and interfaces

Plasma in biomedicine and nanotechnology

Waves and oscillations in the solar corona

**Additional courses** (select courses recommended by the admission board or courses you want attend – not mandatory; remove other courses):

UFY/PFME Computational physics – computer modeling

UMB/575E Numerical mathematics II

UFY/OPME Optical measurements

UFY/PTE Plasma and vacuum technology

UFY/PFAE Plasma astrophysics

UFY/FPE Plasma physics

UFY/KT2E Quantum theory II – light-matter interaction

UFY/PZSE Signal processing and transmission

UFY/FPLE Solid state physics

UFY/SVEE Statistical evaluation of experimental data

UFY/TSFE Thermodynamics and statistical physics

\* The exams are waived for students from the United Kingdom, the United States, Australia, New Zealand, Ireland, English-speaking Canada and South Africa.

In the attachment is included an **outline of the theme** (which may include: introduction, aim, - tested hypotheses, methods, expected results; extent approx. 1-2 pages), **timetable of work** (divided into years or semesters, apart from a timetable of experimental work it is to include a study timetable of set subjects and language courses, a timetable of the student's individual activities – seminars, participation in conferences, involvement in teaching activities etc.) and the **funding for the experimental work** including the involvement of the doctoral student in research projects.