

## Study Program Advanced Functional Materials at TU Chemnitz

Example on how to describe the "Practical Work Experience" in study programs:

Lecture	hours	content	level	comment
Analytical Chemistry	30	basic lab work, filtration, centrifugation, titration, gravimetry, qualitative and quantitative analyses	basic	
Inorganic Chemistry Experiment	20	crystallization, working under inert atmosphere, complex formation, solid state reaction	advanced	
Organic Chemistry Experiment	40	setting up glass apparatus, reactions in solution and under inert atmosphere, purification of solvents, distillation, column chromatography	basic	
Basic Experimental Techniques in Physics	20	Scientific data acquisition and analysis, data averaging, data error analysis, linear regression, scientific record keeping in a lab book	basic	
Physics Experiment	20	experimental work under high vacuum and with cryostats, laser physics, scanning probe microscopy, spectroscopic ellipsometry	expert	
Condensed Matter Physics	60	bonds and structure in solid state, structure determination by x-ray diffraction, thermal properties, phonons, electrons in periodic potential	basic	