Anhang zum Studienplan für den spezialisierten Joint Masterstudiengang Precision Engineering
an der Philosophisch-naturwissenschaftlichen Fakultät der Universität Bern und
dem Departement für Technik und Informatik der Berner Fachhochschule

Semester	type	∑ ECTS	ECTS	course name	classification	category
1	**Basic courses**	30	5	Introduction to Ultraprecision Engineering	Course	Compulsory
			5	Introduction to Precision Optics	Course	Compulsory
			5	Physics and Structural Mechanics	Course	Compulsory
			5	Introduction to Materials and Analytics	Course	Compulsory
			5	Modelling and simulations	Course	Compulsory
			5	Control and Automation	Course	Compulsory
2	**Advanced course I**	7	7	Advanced Engineering I (in specialization)	Course	Compulsory specialization
	Creative Engineering Lab I	12	12	CE Lab I	Practical	Compulsory
	Electives I*	6	3	Elective courses (selection via KSL)	Course	Elective
	Complementary Skills I	5	2.5	Scientific ethics, writing and presenting	Course	Compulsory
			2.5	Metrology and sensing in industrial environment	Course	Compulsory
3	**Advanced course II**	7	7	Advanced Engineering II (in specialization)	Course	Compulsory specialization
	Creative Engineering Lab II	12	12	CE Lab II	Practical	Compulsory
	Electives II*	6	3	Elective courses (selection via KSL)	Course	Elective
	Complementary Skills II	5	2.5	Innovation and Entrepreneurship	Course	Compulsory
			2.5	Patenting and IP Management	Course	Compulsory
4	**Master Thesis**	30	30	-	Master thesis	Compulsory

* selection of two courses per semester via KSL
during the study program a minimum of three courses has to be selected from offers of the MSc PrE
a maximum of one course may be selected from the offer of the MSc BME (listed courses)

Bern, 24. Mai 2022

Studienleitung Master Precision Engineering
Der Studienleiter:

Prof. Dr. Jürgen Burger

Vom Studienausschuss genehmigt:

Bern, 31. Mai 2022

Im Namen der Phil.-nat. Fakultät
Der Dekan:

Prof. Dr. Zoltan Balogh