
pb343 - Introduction to Laser Material Processing

Module label
Modulkürzel
Credit points
Workload

Introduction to Laser Material Processing
pb343
6.0 KP
180 h
(
Attendance: 56 hrs, Self study: 124 hrs
)

Verwendbarkeit des Moduls

- Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Business Administration and Law (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Business Administration and Law (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Business Administration and Law (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Business Informatics (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Business Informatics (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Business Informatics (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Comparative and European Law (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Comparative and European Law (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Comparative and European Law (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Engineering Physics (Bachelor) > Fachnahe Angebote Biologie
- Bachelor's Programme Engineering Physics (Bachelor) > Fachnahe Angebote Engineering Physics
- Bachelor's Programme Engineering Physics (Bachelor) > Fachnahe Angebote Physik
- Bachelor's Programme Environmental Science (Bachelor) > Fachnahe Angebote Biologie

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- Bachelor's Programme Environmental Science (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Environmental Science (Bachelor) > Fachnahe Angebote Physik
 - Bachelor's Programme Intercultural Education and Counselling (Bachelor) > Fachnahe Angebote Biologie
 - Bachelor's Programme Intercultural Education and Counselling (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Intercultural Education and Counselling (Bachelor) > Fachnahe Angebote Physik
 - Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Biologie
 - Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Physik
 - Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Biologie
 - Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Physik
 - Bachelor's Programme Physics, Engineering and Medicine (Bachelor) > Fachnahe Angebote Biologie
 - Bachelor's Programme Physics, Engineering and Medicine (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Physics, Engineering and Medicine (Bachelor) > Fachnahe Angebote Physik
 - Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Biologie
 - Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Physik
 - Bachelor's Programme Sustainability Economics (Bachelor) > Fachnahe Angebote Biologie
 - Bachelor's Programme Sustainability Economics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Bachelor's Programme Sustainability Economics (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Art and Media (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Art and Media (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Art and Media (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Biology (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Chemistry (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Computing Science (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Dutch Linguistics and Literary Studies (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Dutch Linguistics and Literary Studies (Bachelor) > Fachnahe Angebote Engineering Physics
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- Dual-Subject Bachelor's Programme Dutch Linguistics and Literary Studies (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Economic Education (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Economic Education (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Economic Education (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Economics and Business Administration (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Education (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Elementary Mathematics (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Elementary Mathematics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Elementary Mathematics (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme English Studies (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme English Studies (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme English Studies (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Gender Studies (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Gender Studies (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Gender Studies (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme General Education (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme General Education (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme General Education (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme German Studies (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme German Studies (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme German Studies (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme History (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme History (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme History (Bachelor) > Fachnahe Angebote Physik
 - Dual-subject bachelor's programme Low German (Bachelor) > Fachnahe Angebote Biologie
 - Dual-subject bachelor's programme Low German (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-subject bachelor's programme Low German (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Material Culture: Textiles (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Material Culture: Textiles (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Material Culture: Textiles (Bachelor) > Fachnahe Angebote Physik
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- Dual-Subject Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Mathematics (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Music (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Music (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Music (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Philosophy / Values and Norms (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Philosophy / Values and Norms (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Philosophy / Values and Norms (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Physics (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Politics-Economics (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Politics-Economics (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Politics-Economics (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Protestant Theology and Religious Education (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Protestant Theology and Religious Education (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Protestant Theology and Religious Education (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Slavic Studies (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Slavic Studies (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Slavic Studies (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Social Studies (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Special Needs Education (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Special Needs Education (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Special Needs Education (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Sport Science (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Sport Science (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Sport Science (Bachelor) > Fachnahe Angebote Physik
 - Dual-Subject Bachelor's Programme Technology (Bachelor) > Fachnahe Angebote Biologie
 - Dual-Subject Bachelor's Programme Technology (Bachelor) > Fachnahe Angebote Engineering Physics
 - Dual-Subject Bachelor's Programme Technology (Bachelor) > Fachnahe Angebote Physik
 - Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft (Bachelor) > Fachnahe Angebote
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Zuständige Personen Prerequisites Skills to be acquired in this module Module contents Literatureempfehlungen Links Language of instruction Duration (semesters) Module frequency Module capacity Type of module Module level Teaching/Learning method		Biologie • Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft (Bachelor) > Fachnahe Angebote Engineering Physics • Fach-Bachelor Pädagogisches Handeln in der Migrationsgesellschaft (Bachelor) > Fachnahe Angebote Physik • Schüning, Thomas (module responsibility) • Schüning, Thomas (Prüfungsberechtigt) • Schüning, Thomas (Module counselling)
		Sigrist, M.: Laser, Springer 2018 Hügel, H.: Lasermaterialbearbeitung, Hanser, 2013 Bargel / Schulze: Werkstoffkunde, 12. Auflage, Springer, 2018 English 1 Semester Winter unlimited Ergänzung/Professionalisierung PB (Professionalisierungsbereich / Professionalization) Lecture: 4 hrs/week
Examination Final exam of module	Prüfungszeiten	Type of examination KL
Lehrveranstaltungsform SWS Frequency Workload Präsenzzeit	Lecture 4 SoSe oder WiSe 56 h	