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| **Georg-August-Universität Göttingen**  **Modul B.MES.xxx: *Introduction to Computer Science and Programming*** | 6 C  4 WLH |

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| **Lernziele/Kompetenzen:**  The objective of this module is to intoduce some fundamental concepts in computer science and gain hand-on experience in programming using Python. Students will be intoduced to number bases, binary arithmetics, basic data structures, common algorithms, elementry components of programming (variables, conditionals, loops, functions, lists, dictionaries, I/O and classes), regular expressions, the unix operating system and usage of the command line, and asymmetric encryption (i.e. RSA algorithm, digital signatures). | **Workload:**  Präsenzzeit:  56 hours  Selbststudium:  124 hours |

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| **Lehrveranstaltung: \*\*\* LV neu \*\*\***  *Angebotshäufigkeit:* each summer term |  |
| **Prüfung: written exam (90 minutes)** |  |

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| **Prüfungsanforderungen:**  No requirements. |  |

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| **Zugangsvoraussetzungen:**  None | **Empfohlene Vorkenntnisse:**  High-school level algebra and arithmetic skills. |
| **Sprache:**  English | **Modulverantwortliche[r]:**  Winfried Kurth, Peleg Bar Sapir |
| **Angebotshäufigkeit:**  1 | **Dauer:** |
| **Wiederholbarkeit:**  two times | **Empfohlenes Fachsemester:** |
| **Maximale Studierendenzahl:**  not limited |  |

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| **Bemerkungen:**  Remarks |