

シラバス参照

④ 科目ナンバリング	TMA-MEE213E
④ 開講年度	2022
④ 科目名	(IMAC-U) 機械力学 I
④ 単位数	2
④ 担当教員	FEDORYNENKO DMYT 林部 充宏
④ 備考/Notes	

④ 開講言語	English (英語)
④ 授業の目的・概要及び達成方法等	<p>1. Class subject(目的) To acquire fundamental knowledge regarding dynamic problems which may arise in machinery.</p> <p>2. Object and summary of class(概要) To learn dynamic characteristics of the systems with one, two and multi degrees of freedom obtained by modeling machinery.</p> <p>3. Goal of study(達成目標等) To acquire the ability to apply the knowledge obtained in this class to engineering design.</p>
④ 授業の目的・概要及び達成方法等 (E)	<p>1. Class subject To acquire fundamental knowledge regarding dynamic problems which may arise in machinery.</p> <p>2. Object and summary of class To learn dynamic characteristics of the systems with one, two and multi degrees of freedom obtained by modeling machinery.</p> <p>3. Goal of study To acquire the ability to apply the knowledge obtained in this class to engineering design.</p>
④ 他の授業科目との関連及び履修上の注意	
④ 他の授業科目との関連及び履修上の注意 (E)	Fundamental knowledge on Mathematics I and Mechanics are required.
④ 授業計画	
④ 授業計画 (E)	<p>1. Introduction and fundamental mathematics</p> <p>2. Free vibrations of systems with one degree of freedom: vibration of an undamped system (I)</p> <p>3. Free vibrations of systems with one degree of freedom: vibration of an undamped system (II)</p> <p>4. Free vibrations of systems with one degree of freedom: vibration of an undamped system (III)</p> <p>5. Free vibrations of systems with one degree of freedom: vibrations with viscous damping</p> <p>6. Free vibrations of systems with one degree of freedom: vibrations with viscous, Coulomb, and hysteretic damping</p> <p>7. Forced vibrations of systems with one degree of freedom (I)</p> <p>8. Forced vibrations of systems with one degree of freedom (II)</p> <p>9. Free vibrations of systems with two degrees of freedom (I)</p> <p>10. Free vibrations of systems with two degrees of freedom (II)</p> <p>11. Forced vibrations of systems with two degrees of freedom</p> <p>12. Vibrations of multidegree-of-freedom systems (I)</p> <p>13. Vibrations of multidegree-of-freedom systems (II)</p> <p>14. Summary</p> <p>15. Summary and examination</p>
④ 授業時間外学修	生徒は各クラスを1~2時間勉強する必要があります。理解できない部分が残っている場合は、質問すほうがいいです。
④ 授業時間外学修 (E)	Students are required to review each class for one to two hours. If there remain any parts they cannot understand, they should ask questions.
④ 成績評価方法及び基準	Students are evaluated on their submitted assignments, the midterm examination and the final report.
④ 成績評価方法及び基準 (E)	Students are evaluated on their submitted assignments, the midterm examination and the final report.

教科書 および 参考書	No	書名	著者名	出版社	出版年	ISBN/ISSN	資料種別
	1.	『Mechanical Vibrations SI (5th Edition)』	S. S. Rao	Pearson Education	2011	9789810687120	
	2.	『Mechanical Vibrations』	S. G. Kelly	Schaum's Outline Series	1996	0070340412	
	3.	『An Introduction to Mechanical Vibrations, (3rd Edition)』	R. F. Steidel, Jr.	Wiley	1989	0471845450	
関連URL	Class code (Google Classroom): nlm5h						
添付ファイル							
オフィスアワー							
オフィスアワー(E)							
備考							
実務・実践的授業 /Practical business ※○は、 実務・実践的 授業であることを示す。 /Note: "○" Indicates the practical business							
その他							
更新日付	2022/07/07 16:59						

1単位の授業科目は、45時間の学修を必要とする内容をもって構成することを標準としています。1単位の修得に必要な学修時間の目安は、「講義・演習」については15～30時間に授業および授業時間外学修(予習・復習など)30～15時間、「実験、実習及び実技」については30～45時間の授業および授業時間外学修(予習・復習など)15～0時間です。

One-credit courses require 45 hours of study. In lecture and exercise-based classes, one credit consists of 15-30 hours of class time and 30-15 hours of preparation and review outside of class. In laboratory, practical skill classes, one credit consists of 30-45 hours of class time and 15-0 hours of preparation and review outside of class.