Module EIT-DSV-526-M-7

Digital Signal Processor Laboratory (M, 3.0 LP)

Module Identification

Module Number	Module Name	CP (Effort)
EIT-DSV-526-M-7	*Digital Signal Processor Laboratory*	3.0 CP (90 h)

Basedata

CP, Effort	3.0 CP = 90 h
Position of the semester	1 Sem. in SuSe
Level	[7] Master (Advanced)
Language	[DE/EN] German or English as required
Module Manager	Potchinkov, Alexander, Prof. Dr.-Ing. (PROF | DEPT: EIT) (/staff/340/)
Lecturers	Herzog, Stephan, Dr.-Ing. (WMA | DEPT: EIT) (/staff/615/)
Area of study	[EIT-DSV] Digital Signal Processing
Reference course of study	[EIT-88.781-SG#2010] M.Sc. Electrical and Computer Engineering [2010] (/mhb/FB-EIT/cos-556/)
Livecycle-State	[NORM] Active

Courses

Type/SWS	Course Number	Choice in Module-Part	SL	PL	CP	Sem.
2L	**EIT-DSV-526-K-7** (/mhb/courses/EIT-DSV-526-K-7/)	P	-	PL1	3.0	SuSe

- About **[EIT-DSV-526-K-7]**: Title: "Digital Signal Processor Laboratory"; Presence-Time: 28 h; Self-Study: 62 h

Examination achievement PL1

- Form of examination: **practical laboratory exam**
- Examination Frequency: each summer semester

Evaluation of grades

The module is not graded.

Contents

From [EIT-DSV-526-K-7] Digital Signal Processor Laboratory (/mhb/courses/EIT-DSV-526-K-7/)**:**

- Eigenständige Implementierung von typischen DSP-Algorithmen:
- Steueraufgaben (LED ansteuern)
- Filterung (FIR, IIR)
- Signalgenerierung (LUT, Oszillatoren)
- digitale Audio-Effekte (Dynamikbearbeitung, Hall)

Competencies / intended learning achievements

- Sicherer Umgang mit der Entwicklungsumgebung für die Motorola DSP56300-Familie
- Praktische Erfahrung in der Implementierung digitaler Signalverarbeitung
- Vertiefte Kenntnisse der Prozessorarchitektur, dadurch effizientere Implementierung
- Vertiefte Kenntnisse von Strategien zum Testen und Debugging von DSV-Algorithmen

Requirements for attendance (informal)

Modules:

- [EIT-DSV-531-M-4] Digital Signal Processing (M, 4.0 LP) (/mhb/modules/EIT-DSV-531-M-4/)
- [EIT-DSV-534-M-7] Digital Signal Processing: Algorithms and their Implementation (M, 3.0 LP) (/mhb/modules/EIT-DSV-534-M-7/)

Requirements for attendance (formal)

None

References to Module / Module Number [EIT-DSV-526-M-7]

Course of Study	Section	Choice/Obligation
[EIT-88.781-SG#2010] M.Sc. Electrical and Computer Engineering [2010] (/mhb/FB-EIT/cos-556/)	Elective Subjects	[W] Elective Module
[EIT-88.A44-SG#2018] M.Sc. Media and Communication Technology [2018] (/mhb/FB-EIT/cos-568/)	Technical Elective Subjects	[W] Elective Module
[EIT-88.?-SG#2021] M.Sc. Electrical and Computer Engineering [2021] (/mhb/FB-EIT/cos-686/)	Technical Elective Modules	[W] Elective Module
[EIT-88.?-SG#2021] M.Sc. Media and Communication Technology [2021] (/mhb/FB-EIT/cos-688/)	Technical Elective Modules	[W] Elective Module
[EIT-88.?-SG#2021] M.Sc. Automation and Control (A&C) [2021] (/mhb/FB-EIT/cos-676/)	Elective Modules	[W] Elective Module