Content

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|-------------------------|----------|--------|----------|-----|--------|------|
| GÜV341 | Electronic Navigation-I | 3 | 1 | 0 | 1 | 1,5 | 2 |

| Prerequisites | |
|------------------------|--|
| Admission Requirements | |

| Language of Instruction | Turkish | |
|-------------------------|--|--|
| Course Type | Compulsory | |
| Course Level | Associate Degree | |
| Objective | To teach the students to be able to acknowledge and to use the electronic navigation devices on board | |
| Content | 1.Usage of electronic systems for Location and navigation 2.The basic principles of Hyperbolic systems 3.Loran-C Systems 4.GPS and DGPS 5.satellite navigation systems | |
| References | GEMİ ELEKTRONİĞİ(NUSRET BELİRDİ),INTERNET(IMO and related sites) | |

Theory Topics

| Week | Weekly Contents |
|------|--|
| 1 | Locating |
| 2 | Electromagnetic waves |
| 3 | Hyperbolic navigation systems |
| 4 | Loran-C System |
| 5 | The working principles and usage of GPS and DGPS |
| 6 | Radar |
| 7 | Radar |
| 8 | ARPA Radar |
| 9 | Radar observation and plotting |
| 10 | Manual plotting |
| 11 | Manual plotting |
| 12 | Automatic plotting |
| 13 | Colreg |
| 14 | ARPA radar and safe navigation |