**İçerik**

| Ders Kodu | Dersin Adı | Yarıyıl | Teori | Uygulama | Lab | Kredisi | AKTS |
|---|---|---|---|---|---|---|---|
| IT 530 | Nesnelerin interneti ve Endüstri 4.0 | 1 | 4 | 0 | 0 | 3 | 8 |

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|---|---|
| Ön Koşul | |
| Derse Kabul Koşulları | |

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|---|---|
| Dersin Dili | İngilizce |
| Türü | Zorunlu |
| Dersin Düzeyi | Yüksek Lisans |
| Dersin Amacı | This course will describe the market around the Internet of Things (IoT), the technology used to build these kinds of devices, how they communicate, how they store data, and the kinds of distributed systems needed to support them. We will start with simple examples and integrate the techniques we learn into a class project in which we design and build an actual IoT system. |
| İçerik | Overview of Internet of Things<br>How IOT became 21 st Century Hottest Topic<br>How Internet of Things works<br>IoT Architecture<br>Hardware<br>Popularity & Scope<br>Industrial IoT<br>Operationg Systems<br>Security<br>Lora/Lorawan/Lorasim<br>Applications and Case Studies |
| Kaynaklar | Lee, In, and Kyoochun Lee. "The Internet of Things (IoT): Applications, investments, and challenges for enterprises." Business Horizons 58.4 (2015): 431-440.<br>Chiang, Mung, and Tao Zhang. "Fog and IoT: An overview of research opportunities." IEEE Internet of things journal 3.6 (2016): 854-864. |

**Teori Konu Başlıkları**

| Hafta | Konu Başlıkları |
|---|---|
| 1 | Introduction |
| 2 | IoT Architecture |
| 3 | Hardware |
| 4 | Operating Systems |
| 5 | Security |
| 6 | Protocols |
| 7 | Industrial IoT |
| 8 | Mid Term Exam |
| 9 | Lora/LoraWAN/LoraSim |
| 10 | Applications |
| 11 | Case Studies |