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| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Dersin Adı** | | **Kodu** | **Yarıyıl** | **T+U** | **Kredi** | **AKTS** | | **Endüstri 4.0 ve Dijital Dönüşüm** | |  | 2 | 2+0 | 2 | 3 | | Ön koşul Dersler |  | | | | | | | Dersin Dili | Türkçe | | | | | | | Dersin Türü | Seçmeli | | | | | | | Dersin Koordinatörü |  | | | | | | | Dersi Veren |  | | | | | | | Dersin Yardımcıları |  | | | | | | | Dersin Amacı | Yüz yüze. Konu anlatımı, soru-cevap, örnek çözümler, doküman incelemesi. Derse hazırlık aşamasında öğrencilerden, ders kaynaklarından haftanın konusunu incelemeleri, derste yapılması planlanan etkinliklere hazırlanmaları ve gerektiğinde etkinlikleri yürütmeleri beklenmektedir. | | | | | | | Dersin Öğrenme Çıktıları | Bu dersin sonunda öğrenci;  1.Endüstri 4.0’ın uygulamaları olan Nesnelerin İnterneti, Yapay Zeka, Eklemeli Üretim, Makine Öğrenmesi ve Artırılmış Gerçeklik gibi yeni teknolojileri öğrenir.  2.Dijital dönüşümün yapısını kavrar; dijital dönüşümü etkileyen faktörleri ve dijital dönüşümün önündeki engelleri tespit eder.  3.Dijital dönüşümün inovasyonla ilişkisini ve kurumsal performansı nasıl etkilediğini öğrenir.  4.İş hayatının geleceğinin nasıl şekilleneceğini anlar ve yorumlar. | | | | | | | Dersin İçeriği | Dijital dönüşüm kavramı, yapay zeka, arttırılmış gerçeklik, makine öğrenmesi, nesnelerin interneti endüstri 4.0. | | | | | | | **Haftalar** | **Konular** | | | | | | | 1 | Dijital Dönüşüme Giriş: Temel Kavramlar | | | | | | | 2 | Dijital Dönüşümü Etkileyen Faktörler ve Dijital Dönüşümün Önündeki Engeller | | | | | | | 3 | Endüstri 4.0’a Giriş: Tasarım İlkeleri ve Kavramsal Çerçeve | | | | | | | 4 | Dijital Dönüşüm ve Endüstri 4.0 İlişkisi | | | | | | | 5 | Dijital Dönüşüm Yöntemleri ve Teknolojilerine Giriş | | | | | | | 6 | Nesnelerin İnterneti (IoT): Bağlantılı Nesneler | | | | | | | 7 | Büyük Veri ve Bulut Bilişim | | | | | | | 8 | Yapay Zeka, Makine Öğrenmesi ve Derin Öğrenme | | | | | | | 9 | Artırılmış Gerçeklik ve Sanal Gerçeklik | | | | | | | 10 | 3D Yazıcı Teknolojisi: Eklemeli Üretim | | | | | | | 11 | Akıllı Robotlar ve İş Hayatında Kullanımı | | | | | | | 12 | Otomasyon ve Sensör Teknolojileri: Üretim ve Hizmet Süreçlerinde Dijital İzlenebilirlik | | | | | | | 13 | Dijital Ekosistem, Dijital Bozulma ve Değişen İş Modelleri | | | | | | | 14 | Sürdürülebilir Bir Dijital Dönüşüm Kültürü Oluşturmak | | | | | | | 15 | Genel Tekrar | | | | | |  |  | | --- | | **Genel Yeterlilikler** | | Öğrencilerden bu dersin ana konularını anlamaları ve alanları ile uygulamalarında kullanmaları beklenir. | | **Kaynaklar** | | Schwap, K. (2016). *Dördüncü sanayi devrimi*, Optimist Yayınlar. | | **Değerlendirme Sistemi** | | Dönem başında ders izlencelerinde belirtilir. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **PROGRAM ÖĞRENME ÇIKTILARI İLE**  **DERS ÖĞRENİM ÇIKTILARI İLİŞKİSİ TABLOSU** | | | | | | | | | | | | | | | | | |  | **PÇ1** | | **PÇ2** | **PÇ3** | | **PÇ4** | **PÇ5** | | **PÇ6** | **PÇ7** | | **PÇ8** | **PÇ9** | | **PÇ10** | **PÇ11** | | **ÖÇ1** | 3 | | 2 | 3 | | 3 | 5 | | 5 | 3 | | - | 2 | | 4 | 2 | | **ÖÇ2** | 3 | | 2 | 3 | | 3 | 5 | | 5 | 3 | | - | 2 | | 4 | 2 | | **ÖÇ3** | 3 | | 2 | 3 | | 5 | 5 | | 5 | 3 | | - | 2 | | 4 | 2 | | **ÖÇ4** | 3 | | 3 | 3 | | 3 | 5 | | 5 | 3 | | - | 2 | | 4 | 2 | | **ÖÇ: Öğrenme Çıktıları PÇ: Program Çıktıları** | | | | | | | | | | | | | | | | | | **Katkı**  **Düzeyi** | | **1 Çok Düşük** | | | **2 Düşük** | | | **3 Orta** | | | **4 Yüksek** | | | **5 Çok Yüksek** | | |   Program Çıktıları ve İlgili Dersin İlişkisi   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Ders** | **PÇ1** | **PÇ2** | **PÇ3** | **PÇ4** | **PÇ5** | **PÇ6** | **PÇ7** | **PÇ8** | **PÇ9** | **PÇ10** | **PÇ11** | | Endüstri 4.0 ve Dijital Dönüşüm | 3 | 2 | 3 | 4 | 5 | 5 | 3 | - | 2 | 4 | 2 | |