

Telecommunications Engineering

[TE 6385](#) ([CS 6385](#)) Algorithmic Aspects of Telecommunication Networks (3 semester credit hours)
This is an advanced course on topics related to the design, analysis, and development of telecommunications systems and networks. The focus is on the efficient algorithmic solutions for key problems in modern telecommunications networks, in centralized and distributed models. Topics include: main concepts in the design of distributed algorithms in synchronous and asynchronous models, analysis techniques for distributed algorithms, centralized and distributed solutions for handling design and optimization problems concerning network topology, architecture, routing, survivability, reliability, congestion, dimensioning and traffic management in modern telecommunication networks. Prerequisites: [CS 5343](#) and [CS 5348](#) and ([CS 3341](#) or [ENGR 3341](#) or equivalent). (3-0) Y

[TE 6V98](#) Thesis (3-9 semester credit hours) Pass/Fail only. May be repeated for credit. Instructor consent required. ([3-9]-0) S

[TE 8V40](#) Individual Instruction in Telecommunications Engineering (1-6 semester credit hours) Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-6]-0) S

[TE 8V70](#) Research in Telecommunications Engineering (3-9 semester credit hours) Pass/Fail only. May be repeated for credit. Instructor consent required. ([3-9]-0) S

[TE 8V99](#) Dissertation (1-9 semester credit hours) Pass/Fail only. May be repeated for credit. Instructor consent required. ([1-9]-0) S