

course description



این فایل به منظور کمک به متقاضیان تحصیل در کشور ایتالیا توسط گروه فلای تو ایتالی به صورت رایگان تهیه شده است لطفاً از خرید این فایل خودداری فرمایید.

اسفاده از این فایل در صفحات مجازی و وبسایت ها با ذکر نام تهیه کننده بلامانع است.

کانال تلگرام
فلای تو ایتالی



کانال یوتیوب
فلای تو ایتالی



پیج اینستاگرام
فلای تو ایتالی



سایت
فلای تو ایتالی



معرفی فلای تو ایتالی

سلام!

تیم فلای تو ایتالی متشکل از چند دانشجو که فعالیت خودمون را از ماه بهمن سال 1401 آغاز کردیم و هدف تیم ما این است که به شما کمک کنیم تا بتوانید به صورت مستقل و بدون نیاز به مشاوران مهاجرتی برای دانشگاه های ایتالیا اپلای کنید و پذیرش بگیرید . با توجه به اینکه بسیاری از موسسه های مهاجرتی هزینه های بالایی را برای اخذ پذیرش از دانشگاه های ایتالیا از دانشجو دریافت میکنند ، ما تصمیم گرفتیم با تلاش و تجربه خود به دانشجو ها کمک کنیم که بدون هزینه اضافه کار های مهاجرتی خودشان را انجام بدهند .

در این راستا در طی سال های گذشته ویدئو های مختلفی را برای نحوه اپلای کردن دانشگاه های ایتالیا ضبط و منتشر کردیم تا به دانشجویان کمکی کرده باشیم تا بتوانند در این مسیر با کمترین هزینه از دانشگاه های ایتالیا پذیرش بگیرند .

پس اگر سوال یا نیاز به راهنمایی در زمینه مهاجرت تحصیلی به کشور ایتالیا داشتید ، با ما همراه باشید و سوالات خودتون را از ما بپرسید . ما در کنار شما خواهیم بود و شما را همراهی خواهیم کرد .

مدیریت fly to italy



طریق استفاده از فایل

برای استفاده از این فایل ، صفحات بعد را کپی گرفته و به
دانشگاه مبدا ببرید و تاییدات لازم را بگیرید



Semnan University

SUMMARY OF COURSE DESCRIPTIONS ASSOCIATE OF INFORMATION TECHNOLOGY

Abbreviations: P=Pre-Requisite B=Basic, G=General, M=Major, C=Compulsory, S=Specialized, E=Elective SS=Summer Session, OG=Optional General

	Course Title	Credit		Description	Type* of Course
		Theoretical	Practical		
01	Mathematics 1	3	-	Introduction to Calculus, Cartesian coordinates, differentiation and limit functions, approximation of roots of equations.	B
02	Basic of Computer & Programming (emphasize on Information Technology concepts)	3	-	This course is designed to give students the skills required for basic computer use. Students are given a brief overview of basic computer concepts and are provided basic information on hardware, memory, multimedia, storage, networks and application software. This course teaches fundamental concepts and terminology of computer programming. Students will develop skills in designing and writing simple computer programs.	S C
03	Physical Education 1	-	1	This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors.	G
04	Physics 1 (Mechanical physics)	3	-	Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits.	B

05	General Persian	3	-	This course introduces the great Persian writers and poets.	G
06	General Language	3	-	In These Courses students will learn general and English requirements.	G
07	Physics 2 (Physics of Electricity and Magnetism)	3	-	Principles and applications of electricity, magnetism, light, and modern physics with emphasis on fundamental concepts, problem solving, notation, and units. Fundamentals of Physics Textbook by David Halliday, Jearl Walker, and Robert Resnick	B
08	Advanced programming	3	-	Introduction to C++ programming language and object oriented programming. Object oriented concepts including polymorphism, encapsulation, and inheritance.	S C

09	Discrete structures	3	-	An introduction to the foundation of discrete structures as they apply to computer science, focusing on providing a solid theoretical foundation for further work. Topics include: sets, ordered structures, graphs and trees, functions, proof techniques, number systems, logic, Boolean algebra, etc. discrete mathematics richard johnsonbaugh	C
10	General Workshop	-	1	This course focuses on the initial training of welding, wiring, molding and soldering.	B
11	Differential Equation	3	-	Study of differential equations that arise as models of phenomena in engineering. Topics include: first-order equations; linear equations; second-order equations and their applications; systems of linear equations; series solutions; Laplace transforms; introduction to partial differential equations.	B
12	Mathematics 2	3	-	Introduction to differential calculus, integral double and triple, three-variable equations, and Matrix series analysis, partial derivative	B

13	Data Structure	3	-	A study of the development and use of Abstract Data Types for storing and retrieving data. Data structures considered include lists, strings, tables, stacks, trees, and graphs. Pointers, templates, and classes are used for implementing data structures. Other topics include searching and sorting algorithms and recursion.	C
14	English for Specific Purposes	2	-	Computer related topics and essays in English is included in this course and it makes the students ready for any computer related expressions and words.	C
15	Logic Circuits	3	-	Covers the design and application of digital logic circuits, including combinational and sequential logic circuits.	C
16	Strategic Management of Information Technology	3	-	Introduction to the structure and the conceptual architecture of Information Technology Systems (ITS) and understanding of different kinds of electronic services. Introduction to the framework and process of strategic planning systems and methods of providing a strategic plan of organizations based on IT approach.	S

17	Applied Statistics & Probabilities	3	-	Elementary statistical methods and applications to engineering problems, samples and populations, frequency distributions, probability theory, basic distributions, random sampling, point and interval estimation, hypothesis testing and linear regression and correlation are studied.	B
18	Population & Family Planning	1	-	Introduces issues and programmatic strategies related to the development, organization, and management of family planning programs, especially those in developing countries.	G
19	Algorithm Design	3	-	This is an intermediate algorithms course with an emphasis on teaching techniques for the design and analysis of efficient algorithms, emphasizing methods of application. Topics include divide-and conquer, randomization, dynamic programming, greedy algorithms, incremental improvement, complexity, and cryptography. Introduction to Algorithms Book by Charles E. Leiserson, Clifford Stein, Ronald Rivest, and Thomas H. Cormen	S
20	Computer Architecture	3	-	Includes the organization and architecture of computer systems hardware; instruction set architectures; addressing modes; register transfer notation; processor design and computer arithmetic; memory systems; hardware implementations of virtual memory, and input/output control and devices. Computer Organization and Architecture: Designing for Performance Textbook by William Stallings	S

21	Theory of formal languages and Automata	3	-	The course introduces some fundamental concepts in automata theory and formal languages including grammar, finite automaton, regular expression, formal language, pushdown automaton, and Turing machine.	S
22	Principles of Designing Databases	3	-	Studies of database management including: concepts and characteristics, planning organization, data structures, semantic data modeling, conceptual design, physical design, administration, and implementation. Students will design a database.	C
23	Principles and Fundamentals of Management	3	-	This course explores fundamentals of management for students. It addresses the challenges of the following: managing technical professionals and technology assets; human resource management; budgeting and managerial accounting; management of services, infrastructure, outsourcing, and vendor relationships; technology governance and strategy; and resource planning	C
24	Physics 1 Lab	-	1	This course covers mostly Newtonian mechanics, emphasizing problem solving and math skills useful for physics. Reviews algebra, geometry, and trigonometry as applied to physics.	S

25	Presentation Methods of Scientific and technical Material	3	-	The most important factors that should be considered while presenting in a seminar or a class. This course demands each student to give at least 5 presentations. Other topics include how to write references, how to write papers efficiently and articulately and how to write regular reports while working on a project.	C S
26	Software Engineering 1 , 2	3	-	Analysis, Design, Project Management. Applying a development design process to produce high quality software. Topics include: identifying user requirements; performing problem analysis to produce process oriented documentation; using UML notation to create design models and diagrams; investigating and applying design patterns, project management; configuration management. Completing software projects applying development processes using an object-oriented language.	C
27	Database Lab	-	1	This course held in laboratory and covers mostly databases designing skills.	C
28	Computer Networks 1 & 2	3	-	Considers a wide range of concepts used in the design and implementation of modern network systems. Course content will be organized according to the TCP/IP and the OSI model. Among topics that will be included are hardware components, protocol suites 802.3(especially TCP/IP), network topologies, IEEE networks, bridging, and routing	C S

29	Engineering Economics	3	-	Learning the best project selection techniques from existing projects under the conditions of certainty.	C
30	Computer Network Lab	-	1	This course held in laboratory and covers mostly computer networking device configuration skills.	C
31	Management & Control of Information Technology Projects	3	-	Basic principles of project management are taught with a particular focus on project planning for information technology hardware, software and networking project implementation. Management of application development and major Web development projects will also be addressed.	S
32	Operating systems	3	-	A study of operating system concepts and how those concepts are used in the design and implementation of modern operating systems. Topics include process management, processor scheduling, memory management, virtual memory, I/O, file systems, deadlocks, and concurrency	C S

33	Basics of Digital Electronic	3	-	The course introduces the fundamentals of the lumped circuit abstraction. Topics covered include: resistive elements and networks; independent and dependent sources; switches and transistors; digital abstraction; amplifiers; energy storage elements; dynamics of first- and second-order networks; design in the time and frequency domains; and analog and digital circuits and applications. Design and lab exercises are also significant components of the course	S
34	Strategic Management of Information Technology	3	-	Introduction to the structure and the conceptual architecture of Information Technology Systems (ITS) and understanding of different kinds of electronic services. Introduction to the framework and process of strategic planning systems and methods of providing a strategic plan of organizations based on IT approach.	S
35	Information Technology Engineering 1 , 2	3		This course covers a wide range of information technology concepts such as: web-based technologies (HTML, PHP, JavaScript, and cloud-base services), computer networking devices communication like Routers, Switches, and Access-points.	C S
36	Computer-Aided Graphics	3	-	Computer Graphics is a study of the hardware and software principles of interactive raster graphics. Topics include an introduction to the basic concepts, 2-D and 3-D modeling and transformations, viewing transformations, projections, rendering techniques, graphical software packages and graphics systems.	S

37	Operating Systems Lab	-	1	This course held in laboratory and covers mostly operating system contents and different sorts of operating systems.	C
38	Internship	-	-	Students undertake a significant experiential learning opportunity, typically with a company. The internship represents an educational strategy that links classroom learning and student interest with the acquisition of knowledge in an applied work setting. Through direct observation, reflection and evaluation, students gain an understanding of the internship site's work, mission, and audience, how these potentially relate to their academic study, as well as the organization's position in the broader industry or field. Students will produce a critical reflection on their internship experience demonstrating how they have addressed specific learning goals.	C
39	Physics 2 Lab	-	1	This course held in laboratory and covers mostly principles and applications of electricity, magnetism, light, and modern physics with emphasis on fundamental concepts, problem solving, notation, and units	B
40	Microprocessor 1	3	-	This course has an emphasis on microprocessor programming and assembly language programming, utilizing 8, 16 and 32 bit processors (Intel, Freescale, ARM). The student will design and implement embedded applications for dedicated hardware platforms. Topics include CPU concepts (registers, address bus, data bus, internal versus external ROM, internal versus external RAM, program counter, stack pointer, interrupts), input/output mechanisms, machine data types, basic assembly language programming, timers and interrupt handling	C S

41	Artificial Intelligence	3	-	A research field that studies how to realize the intelligent human behaviors on a computer. ... The main research topics in AI include: problem solving, reasoning, planning, natural language understanding, computer vision, automatic programming, and machine learning, and so on.	C S
42	Ecommerce Systems	3	-	This course introduces the concepts, vocabulary, and procedures associated with E-Commerce and the Internet. The student gains an overview of all aspects of E-Commerce. Topics include development of the Internet and E-Commerce, options available for doing business on the Internet, features of Web sites and the tools used to build an E-Commerce web site, marketing issues, payment options, security issues, and customer service.	C S
43	Multi-media systems	3	-	This course has covered a wide range of multi-media technologies and systems. This is about how information is transferring between different systems. For example it talks about file formats and compression algorithms like JPEG, MP4, etc. this course also covers data transferring and broadcasting systems like Compact-Disks (CDs) and video broadcasting systems.	C S
44	Physical Education 2	-	1	This class is designed to provide students with the opportunity to explore and understand the benefits of speed/Agility/strength training for team sports. The students will participate in various physical activities and learn a variety of fitness habits that promote a healthy lifestyle.	G

45	Expert Systems and knowledge engineering	3	-	Techniques for the construction of expert systems including computer inference and knowledge acquisition; knowledge representation schemes; conceptual data analysis; plausible reasoning techniques; validation and measurement methods; production-rule programming.	
46	Information Technology Project	-	3	The Final project of Bachelor studies whose successful implementation is mandatory in order to become graduated.	