



Diplôme de Formation
Continue Universitaire

Management 2.0 Telecommunications & Internet

*“Boost your career, become an expert in
telecommunications and Internet management”*



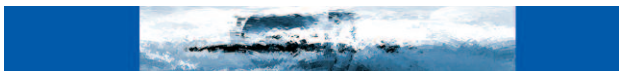
Management 2.0

Telecommunications & Internet

DIPLÔMES, MASTERS ET CERTIFICATS DE FORMATION CONTINUE UNIVERSITAIRE:

COMMODITY TRADING · CONTRÔLE DE GESTION · CORPORATE SOCIAL RESPONSIBILITIES · CRÉATIONS DE LUXE ET MÉTIERS DE L'ART · E-BUSINESS & E-COMMUNICATION · ENTREPRENEURSHIP & BUSINESS DEVELOPMENT · EXECUTIVE MBA · GESTION D'ENTREPRISE · GESTION DES RESSOURCES HUMAINES · GESTION DES RISQUES D'ENTREPRISE · GESTION ET MANAGEMENT DANS LES ORGANISMES SANS BUT LUCRATIF · GESTION QUANTITATIVE DE PORTEFEUILLE · INTERNATIONAL ORGANIZATIONS MBA (IOMBA) · MANAGEMENT DE PROJETS · MANAGEMENT DES INSTITUTIONS DE SANTÉ · MANAGEMENT DES INSTITUTIONS SOCIALES · MANAGEMENT STRATÉGIQUE ACHATS, LOGISTIQUE ET APPROVISIONNEMENTS · MANAGEMENT 2.0 TELECOMMUNICATIONS & INTERNET · MBA EN EMPLOI · NORMES INTERNATIONALES IFRS / IPSAS · SÉCURITÉ DES SYSTÈMES D'INFORMATION · STRATÉGIE EN MARKETING · STRATÉGIE MARKETING, COMMUNICATION & E-BUSINESS

DIPLOMA OF ADVANCED STUDIES



Management 2.0 Telecommunications & Internet



"Boost your career, become an expert in telecommunications & Internet management"

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Course Objectives

The rapid development of Information and Communication Technologies (ICT), especially Telecommunications and Internet, has affected all companies, all organizations. Although Moore's Law (doubling of the processing capability of computers every 18 months) has concentrated developments on the technology aspect in the last few decades, the future will be characterised by the implementation of ICT from the management point of view.

Management 2.0 is based on the idea that we must not only look to technological advances but also develop innovative managerial approaches. Management of the future is one based on Internet and on telecommunications. Modern organizations are increasingly digital companies that base the development of both their market and their internal organization on the Internet (including Intranet applications). The Internet relies on telecommunications in terms of technological infrastructures and software.

The objective of this diploma is to train managers who will be able to optimize the use of telecommunications and Internet. At the end of the diploma, managers will have the following skills: knowledge of the economic, managerial and technological dimensions of the impact of telecommunications and the Internet. These skills will be useful in any organization.

The course shows how ICT has developed. Participants will be able to integrate ICT in companies and organizations. Many companies seek managers who have both "technical" and "managerial" skills in the ICT field. In the next decades executives will be required to have an understanding of continuous technological change and to effectively introduce ICT into their companies or organizations.

The diploma is suitable for any candidate with an engineering background who wants to go into management, or, conversely, any manager in sales or administration who wishes to acquire a grounding in technology in order to become a senior executive in this sector. Job opportunities do not arise in "High Tech" companies alone, but also, and in the great majority of cases, in sectors where telecommunications and the Internet are crucial.



Public

Any junior or senior staff with a strong interest in the dynamics of telecommunications and the Internet can apply and boost their careers through this diploma.

- ▶ Managers of companies who use communication systems
- ▶ Persons in charge of telecommunications and network services or products
- ▶ Managers who wish to enter the economic sector of new ICT
- ▶ Engineers who are general practitioners or specialists in the telecommunications sector and who wish to acquire skills in telecommunications management
- ▶ Specialist engineers in other fields who are seeking another speciality
- ▶ Junior or senior executives wishing to retrain in the field of telecommunications and/or Internet

Teaching Approach

This course is designed and taught by telecommunications and internet experts who are active in the sector, some of whom are also teaching at universities. These experts have known the sector for a long time and have been involved in or have observed major changes in areas such as cable, satellite, mobile phones and the Internet revolution.

The course provides a balance between theoretical approaches essential for identifying sound benchmarks in a continuously changing environment, and case studies and team work.

Active learning is the norm. Each 24-hour module will be validated by a formal examination and/or by individual or group work.

For each hour taught, 1 or 2 additional hours of personal studies are necessary for reading and preparing exams and case studies.

Directors of the Diploma and Scientific Advisory Board

- ▶ **Bernard MORARD**, Dean of the Faculty of Economic and Social Sciences, University of Geneva
- ▶ **Michel LÉONARD**, Professor of the Department of Information Systems, University of Geneva
- ▶ **Patrick-Yves BADILLO**, Professor, University of Aix Marseille, Director of Medi@SIC Laboratory
- ▶ **Eli NOAM**, Professor, Columbia University, Director of Columbia Institute for Tele-Information
- ▶ **Yves FADE**, former sales executive of France Telecom and advisor to the Deputy Chairman of France Telecom, consultant to major telecoms companies.

Programme

Module 1

Basic Economics of Telecommunications & Internet

This module gives a historical, technological and more specifically an economic panorama of the dynamics of telecommunications and the Internet. The main developments, as well as a first basic technical vocabulary, are presented within the framework of this module.

We will examine:

- ▶ The beginnings and rise of telecommunications (from origin to digitalization)
The main terms of the technical vocabulary are presented in a simple way (concept of signal, information theory, flow, bandwidth, coaxial cable and optic fibre, notion of Erlang, principles and consequences of digitalization, rise of cable, satellite, triple play offer, etc.)
- ▶ The dynamics of Internet
The contemporary digital economy is the result of developments in both the technological and regulatory spheres. Indeed the starting point of the new economy was the dismantling of AT&T in 1984. From that new industrial organization and new regulation, the whole sector of telecommunications and Internet has completely changed. Almost all economic sectors have also been affected by this evolution in regulation
- ▶ Natural monopoly, Pricing
- ▶ Deregulation
- ▶ Economics of networks

Module 2

Stakeholders, Markets, Strategies

At the end of this module, students will have a global comprehension of the sector and of its economic and managerial dynamics.

We will study:

- ▶ The information and communication technologies market in the global economy
- ▶ Large markets and their major players: telecommunications services, telecommunications equipment, data-processing departments and software, data-processing equipment, television services, consumer electronics, Internet
- ▶ New uses
- ▶ Large international organizations and their approach to telecommunications

Module 3

Management 2.0: Innovation and the Role of Information Systems (IS)

Web and ERP applications have become the decisive strategic tools of company performance. Theories on innovation make it possible to understand how companies and large markets have changed from a supply and technology push logic to a demand and user logic.

The program is the following:

- ▶ Information Systems and companies (the computerized and telecommunicating company, the technological infrastructure of IS, etc.)
- ▶ Theories of innovation
- ▶ The strategic role of information
- ▶ Communication and the user at the core of telecommunications and Internet market dynamics

Module 4

Technological Bases: The Technical Dimension of Networks

This module gives the main technical bases of telecommunications and Internet networks.

- ▶ Introduction
- ▶ History (the OSI model of the ISO)
- ▶ LAN (Local Area Networks)
- ▶ Digital telephony
- ▶ Network protocols
- ▶ IP Technologies (history, IP addressing, IP transport)
- ▶ Analysis of problems
- ▶ Local PC networks
- ▶ Security



Module 5

Telecommunications & Internet: New Business Models and New Marketing

Internet has revolutionized the way in which companies design their business models: these are now based on entirely new concepts that have given rise to completely different marketing processes.

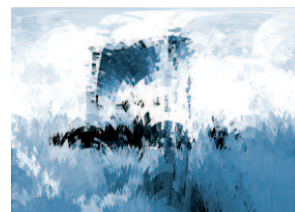
- ▶ New business models (case studies: Google, Iliade, etc.)
- ▶ E-commerce and e-marketing; from direct marketing to e-marketing
- ▶ CRM: customer/user relationship management
- ▶ The marketing mix of an e-store
- ▶ Communication and marketing campaigns on Internet

Module 6

Legal approach, Governance and Regulation

Main bases for the regulation and governance of telecommunications and Internet are analysed in this module.

- ▶ Governance, stakeholders and regulation
- ▶ Normative aspects
- ▶ Legal aspects (laws concerning telecommunications and Internet)
- ▶ Regulation, co-operation, interoperability
- ▶ Systems, services, security and risks aspects
- ▶ International aspects (ITU, etc.)



Module 7

New Products and Services, Markets and Contracts

Understanding the needs of markets and contracts in the field of telecommunications and Internet requires a detailed presentation.

- ▶ Products: changes and development
- ▶ Main manufacturers
- ▶ New systems
- ▶ Different market structures
- ▶ Studies: good and bad studies
- ▶ Documentary, qualitative, quantitative studies
- ▶ The new “invitations to tender”: RFC (Request for Comment), RFQ (Request for Quotation)
- ▶ Executive Summary and study report
- ▶ Chain of analysis: from need to demand
- ▶ Impact of cultures, systems approach

Module 8

Management of the Costs of Telecommunications

The cost of telecommunications is rising for companies. Controlling telecommunications costs requires specific skills:

- ▶ Why is it so difficult to reduce the costs of telecommunications?
- ▶ How to reduce telecommunications expenditure?
- ▶ Development of an approach to cost control
- ▶ The telecommunications audit

Module 9

Project Management and Strategic Planning

The objective of this module is to impart the main elements of managing a telecommunications and Internet project.

- ▶ Project management
- ▶ Strategic planning in telecommunications
- ▶ Planning for new technologies
- ▶ Feasibility studies
- ▶ Forecasting telecommunication services
- ▶ Benchmarking in telecommunications

Module 10

Case Studies: The Expertise of Managers working for a Large Telecoms Operator

Two experts will present their approaches on topics they have chosen, for example:

- ▶ The mobile market and applications
- ▶ IP telephony
- ▶ The creation of products for the general public; development of product offerings
- ▶ Development of services and networks for companies
- ▶ Expectations of a Board of Directors compared to those of a telecom and IT Department
- ▶ Strategic positioning of international operators and trends
- ▶ Convergence of fixed-mobile and voice-data
- ▶ The cycle of adoption of new technologies and new uses

Module 11-12

Management of a Telecom Project, Choice of Investment and Profitability: A Simulation Game

A complete simulation game using the example of a cable network and/or satellite system project may be proposed. This simulation game will give an understanding of the decision-making process involved in selecting technology in the telecommunications sector. It will also impart the capability to apply essential management criteria such as net present value, internal rate of return. The exercise will also deal with pricing principles in the sector. In addition, all accounting and financial criteria related with the profitability of a project will be reviewed through an exercise based on an Internet investment.



ASSESSMENT

Assessment criteria are determined separately for each course and follow normal university standards.

In order to obtain the diploma, students must attend each course, hand in all assignments, and attend all exams. Any absence must be justified. An overall average of 4.0 must be achieved in order to graduate, and no more than one mark between 3.0 and 4.0 will be accepted. A mark lower than 3.0 will automatically disqualify the student from obtaining the diploma, and the student will have to re-take the course the following year.

The diploma is awarded to those who have satisfied the conditions of the assessment criteria for all of the modules (33 credits).

Students attending one or more modules will receive an official "attestation" documenting their participation in the course.

MBA

majoring in MANAGEMENT 2.0: TELECOMMUNICATIONS & INTERNET

Completed courses may also be credited towards an Executive MBA (in English) with a major in Management 2.0: Telecommunications & Internet.

Admission criteria for the Executive MBA:

- ▶ university degree from a reputable institution (Bachelor level or equivalent)
- ▶ at least 3 years of relevant work experience
- ▶ a basic knowledge of Microsoft Office



For more information, please contact:

Executive MBA
HEC, Université de Genève • UNI MAIL
40, boulevard du Pont-d'Arve • CH-1211 Genève 4

Tél: +41 22 379 88 21
Fax: +41 22 379 81 04
E-mail: emba-hec@unige.ch

www.mba.unige.ch

Practical Information



(Photo: Gustavo Carlos)

How to Apply

Applications must have the following documents:

1. Application form completed and signed
2. Your updated resume in English
3. 2 passport photos
4. A cover letter in English
5. Letters of recommendation

An e-mail address is required.

Admission Criteria

- ▶ Fluent in English
- ▶ A minimum of 3 years professional experience
- ▶ Comfortable with Microsoft Office

Candidates should have a laptop computer

Location

Courses will alternate between UNI MAIL and HEC Voie Creuse:

UNI MAIL

HEC, Université de Genève
Boulevard du Pont d'Arve 40
1205 Genève

VOIE CREUSE

HEC, Université de Genève
Chemin de la Voie Creuse 16
1202 Genève

Schedule

Three days a month: Monday, Tuesday and Wednesday, full day

Starting: **SEPTEMBER 16, 2012**

** Dates may be subject to change without prior notice*

Fees

CHF 10'200 * (includes all 12 modules)

Individual modules can be attended at a price of CHF 1'500 * per module.

** Costs are subject to change without prior notice*

For Geneva citizens: a Chèque-Formation Emploi of CHF 750 per year for 3 years can be acquired under certain conditions. Please contact:

► Office pour l'orientation, la formation professionnelle et continue (**OFPC**)

Phone: **022 388 44 00**

www.geneve.ch/ofpc

► Service des allocations d'études et d'apprentissage (**SAEA**)

Phone: **022 388 73 50**

www.geneve.ch/bourses

Registration Information

Applications will be accepted until June 30, or one month before the beginning of the module/s you wish to study if you choose to not follow the whole programme.

Please send your application form to the address below:

**Diplôme de Formation Continue
Management 2.0 :
Telecommunications & Internet**

HEC, Université de Genève
Boulevard du Pont-d'Arve 40
CH-1211 Genève 4

For more information, please contact:

celine.wolson@unige.ch

Applications received after the deadline will be taken into consideration only if there are available places.

You will be notified via e-mail that we have received your application.



Université de Genève, HEC, Formation continue / Executive Programmes
FACULTÉ DES SCIENCES ÉCONOMIQUES ET SOCIALES

Diplôme en Management 2.0 Telecommunications & Internet
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