



INSTITUTO POLITÉCNICO NACIONAL
ESCUELA SUPERIOR DE COMERCIO Y ADMINISTRACIÓN
UNIDAD SANTO TOMÁS



**LICENCIATURA EN
ADMINISTRACIÓN Y
DESARROLLO EMPRESARIAL**

**Analysis of management
megatrends
(Versión inglés)**



INSTITUTO POLITÉCNICO NACIONAL

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SYLLABUS

ACADEMIC UNIT: ESCUELA SUPERIOR DE COMERCIO Y ADMINISTRACIÓN, UNIDAD SANTO TOMÁS

ACADEMIC PROGRAM: Bachelor's Degree in Administration and Entrepreneurial Development

LEARNING UNIT: Analysis of management megatrends **LEVEL:** IV

PURPOSE OF LEARNING UNIT:

Generates integral strategies for growth, consolidation and permanence of the organization based on foresight planning.

CONTENTS:

- I. Megatrends in high added value- businesses.
- II. Megatrends for high performance computing, energy technologies and mixed reality.
- III. Megatrends pertaining sustainability, globalization and the knowledge society.
- IV. Megatrends of innovation and strategic foresight planning.

EDUCATIONAL ORIENTATION:

The strategy that governs this subject is the cooperative and collaborative learning. The professor is the one who guides the development of the learning unit with the situated teaching model and the deductive method, utilizing the following strategies: brainstorming, guided discussion, graphic organizers, videos; that allows the comprehension of the analysis of megatrends and assess how changes might impact to global economies and businesses with high added value, solution to a complex business problem and teamwork to develop greater autonomy in students.

ASSESSMENT AND ACCREDITATION:

The assessment is based on three phases: diagnostic assessment, formative evaluation (consisting on self-assessment, peer assessment and hetero-evaluation) and the summative evaluation. In addition, to credit this unit the student should comprise a portfolio containing the evidences that will be evaluated based on rubrics, check lists and a matrix.

The student has the opportunity to approve the learning unit by:

- The evaluation of previously acquired knowledge in which the student should show mastery of competencies in the learning unit, integrating their knowledge (ex. learning how to know, do, be and live together) according to the criteria established by the academy.
- Study in other national or international institutions of higher education that have a mobility agreement with IPN.

REFERENCES:

- Baena, Guillermina & Montero, Alethia. (2013). Planeación prospectiva estratégica: técnica del teatro del Devenir. México. UNAM. 44 p.
http://investigacion.politicas.unam.mx/semprospectiva/docs/workingpapers/p7_2013.pdf
- Edmondson, Amy. (2012). Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy. Integra Ediciones. 352 pp. ISBN:1118216768, 9781118216767
- Godet, Michel and Durance, Philippe. (2011). Strategic Foresight for Corporate and Regional Development. DUNOD - UNESCO - Fondation Prospective et Innovation. 176 pp.
- Naisbitt, John. (2009). Mind Set! Eleven ways to change the way you see-and create the future. New York: Haper Collins Publisher. 304 p. ISBN: 9780061136894.
- Tapscott, Don. (2014). The Digital Economy: Promise and Peril In The Age of Networked Intelligence. USA: Editorial McGraw-Hill. 345 p. ISBN: 0071835555 / 9780071835558



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ACADEMIC UNIT: ESCUELA SUPERIOR DE COMERCIO Y ADMINISTRACIÓN, UNIDAD SANTO TOMÁS

ACADEMIC PROGRAM: Bachelor's Degree in Administration and Entrepreneurial Development

SIDE OUT: In Management SMEs

TRAINING AREA: Professional

MODE: Classroom and On line

LEARNING UNIT: Analysis of management megatrends

LEARNING UNIT TYPE: Compulsory and Theory-Practice

EFFECTIVE DATE: March, 2015

LEVEL: IV

SCHOOL TERM: Sixth

CREDITS: 11 Tepic (7 SATCA)

EDUCATIONAL INTENTION

This learning unit contributes to the graduate profile of the Bachelor's Degree in Administration and Entrepreneurial Development in the development of competencies and skills to systematically analyze and understand the technological, social and administrative megatrends that will impact the business environment in the short, medium and long term.

Analysis of Management megatrends is related to the antecedent learning units: Administración de la Producción, Emprendimiento, Administración Financiera and Strategic Management; as subsequent learning units: Administración de PyMES; and as parallel learning units: Strategic Marketing Management, Decision Making and Negotiation. It is also related transversely with learning units: Solución de Problemas y Creatividad, Fundamentos de Administración and Fundamentos de Comportamiento Organizacional.

PURPOSE OF LEARNING UNIT

Generates integral strategies for growth, consolidation and permanence of the organization based on foresight planning.

ALLOCATED TIMES

THEORY HOURS / WEEK: 4.0

PRACTICE HOURS / WEEK: 3.0

THEORY HOURS / SEMESTER: 72.0

PRACTICE HOURS / SEMESTER: 54.0

TOTAL HOURS / SEMESTER: 126.0

LEARNING UNIT DESIGNED BY:

Academy of Management and Business

REVIEWED BY:

Academic Assistant Director
Nadina Valentin Kajatt Olinda, M.S.

APPROVED BY: School Technical

Advisory Council
9th DECEMBER, 2014

Manelic Maganda de los Santos,
P.A.

School Technical Advisory Council
President

AUTHORIZED BY: IPN Academic Programs Committee of the General Advisory Council.

24th July, 2015

AUTHORIZED AND RATIFIED BY:

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Jaime Ventura Sanchis Cuevas,
P.A.
Director of the Higher Education



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LEARNING UNIT: Analysis of management megatrends PAGE: 3 OF 9

THEMATIC UNIT: I NAME: Megatrends in high value-added businesses.

UNIT OF COMPETENCE

Explains the effects on the structure of business processes based on technological, social and administrative trends.

No.	CONTENTS	HOURS AD Teaching activities		TAA HOURS Independent Learning Activities	KEY REFERENCES
		T	P		
1.1	Megatrend: definition and characteristics	5.0	3.0		9B, 8B, 7B,13C
1.1.1	Paradigm				
1.2	Prospecting the future as part of the megatrends	3.0	4.0		
1.3	Reconfiguring the entrepreneurial archetype toward businesses with high added value	10	6.0		
1.3.1	Information Processing				
1.3.2	Virtual office				
1.3.3	Tech Support for entrepreneurial decisions				
1.3.4	Manufacturing sharing: Knowledge Networks, Clusters and high added value- products				
Subtotals:		18.0	13.0		

LEARNING STRATEGIES

The strategy that governs this subject is the cooperative and collaborative learning. The professor is the one who guides the development of the learning unit with the situated teaching model and the deductive method, utilizing the following strategies:

- Have a brainstorming and discussion session based on documentary research about paradigms.
- Develop a concept map about the characteristics of Tendencies and Megatrends.
- Guided Discussion on "Eleven ways to change the way you see and create the future".
- Practice No.1. Using the commented reading technique (supported by a rubric) the teams should analyze two of the 11 ways to predict the future and its possible applications in a previously selected company. To conclude the activity the team should write a report.
- Based on a documentary research the students, organized in teams, provide a presentation about Technological, Social and Administrative Megatrends, supported by Power Point or Prezi.
- With the guidance of the professor, the learning unit is concluded on the conceptualization of different megatrends (social, technological and administrative) in the reconfiguration of high added value businesses.

LEARNING ASSESSMENT

The teacher will make the assessment of these products from: checklists, observation guides and rubrics, among others.

Portfolio of evidence:

- Graphic organizer (concept map)
- Participation in discussions
- Report of Practice No.1
- Presentation



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LEARNING UNIT: Analysis of management megatrends PAGE: 4 OF 9

THEMATIC UNIT: II NAME: Megatrends for high performance computing, energy technologies and mixed reality

UNIT OF COMPETENCE

Analyzes plausible future circumstances and alternative courses of action that strengthen the company's position based on the technological conditions that affect market trends.

No.	CONTENTS	HOURS AD Teaching activities		TAA HOURS Independent Learning Activities	KEY REFERENCES
		T	P		
2.1	Digital strategies	3.0	2.0		10B, 11B, 12B, 17C
2.1.1	High performance computing				
2.2.	Renewable energies	3.0	2.0		
2.2.1	New energy technologies				
2.3	The era of hyper connectivity	6.0	5.0		
2.3.1	Mixed Reality				
Subtotals:		12.0	9.0		

LEARNING STRATEGIES

The strategy that governs this subject is the cooperative and collaborative learning. The professor is the one who guides the development of the learning unit with the situated teaching model and the deductive method, utilizing the following strategies:

- Based on a documentary research the students, organized in teams, will give a presentation about the topics covered in this thematic unit, supported by Power Point or Prezi.
- Based on the movie "Pirates of Silicon Valley", develop a graphic organizer (synoptic table) about the factors of technological development.
- Develop a graphic organizer about energy technologies.
- Develop a graphic organizer (semantic map) about the era of hyper connectivity.
- Development of practice No. 2. In teams, by using the commented reading technique and a rubric to analyze the technological megatrends that are applied in the selected organization.
- Plenary session in teams, show the courses of action as the result of the development of practice No. 2 "Analysis of technological megatrends of the selected organization.

LEARNING ASSESSMENT

The teacher will make the assessment of these products from: checklists, observation guides and rubrics, among others.

Portfolio of evidence:

- | | |
|---|-----|
| • Graphic organizer (synoptic table) | 15% |
| • Graphic organizer | 10% |
| • Graphic organizer | 10% |
| • Presentations of technological megatrends subject and the results of practice 2 | 30% |
| • Report of Practice No.2 | 35% |



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LEARNING UNIT: Analysis of management megatrends PAGE: 5 OF 9

THEMATIC UNIT: III NAME: Megatrends of sustainability, globalization and the knowledge society

UNIT OF COMPETENCE

Analyzes the social megatrends in the use of scarce and non-renewable resources from the challenges of globalization and market changes.

No.	CONTENTS	HOURS AD Teaching activities		TAA HOURS Independent Learning Activities	KEY REFERENCES
		T	P		
3.1	Sustainability.	7.0	5.0		1B, 4B, 10B, 19C
3.1.1	Global environmental crisis				
3.1.2	Environmental thinking				
3.2	Globalization	4.0	5.0		
3.2.1	The impact on SME's				
3.3	Knowledge society	7.0	3.0		
3.3.1	Management and business evaluation based on information and knowledge				
Subtotals:		18.0	13.0		

LEARNING STRATEGIES

The strategy that governs this subject is the cooperative and collaborative learning. The professor is the one who guides the development of the learning unit with the situated teaching model and the deductive method, utilizing the following strategies:

- Based on a documentary research the students will develop a report about the social megatrends.
- Display of a video "A sustainable world - Tokyo laboratory of the future". The students will develop a graphic organizer (synoptic table) about sustainable development.
- Develop a graphic organizer (conceptual map) about the elements of the knowledge society.
- Practice No. 3 Organized in teams the students will develop a video about "the effects of globalization on Mexican SME's" or about the "environmental crisis in Mexico". The students have to address the complexities created by issues of diversity, gender, ethics and emotions in organizational processes. They will also analyze and evaluate one of these dimensions from which they will generate a report.

LEARNING ASSESSMENT

The teacher will make the assessment of these products from: checklists, observation guides and rubrics, among others.

Portfolio of evidences:

- Report
- Presentation of the theme of social megatrends
- Graphic organizer (synoptic chart)
- Graphic organizer (conceptual map)
- Practice No.3



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LEARNING UNIT: Analysis of management megatrends PAGE: 6 OF 9

THEMATIC UNIT: IV NAME: Megatrends of innovation and strategic foresight planning

UNIT OF COMPETENCE

Develops strategic foresight planning of an enterprise based on high value-added chain and innovation of new products.

No.	CONTENTS	HOURS AD Teaching activities		TAA HOURS Independent Learning Activities	KEY REFERENCES
		T	P		
4.1	Innovation as the bearer of the future in the company	4.0	3.0		2B, 5B, 15B, 18B, 6C, 14C, 16C
4.1.1	The big idea	14.0	10.0		
4.2	Strategic foresight planning				
4.2.1	The future is built twice				
4.2.2	Prospective thinking "El teatro del devenir"				
4.2.3	The prospective simple linear model	6.0	6.0		
4.3	Scenario Construction				
Subtotals:		24.0	19.0		

LEARNING STRATEGIES

The strategy that governs this subject is the cooperative and collaborative learning. The professor is the one who guides the development of the learning unit with the situated teaching model and the deductive method, utilizing the following strategies:

- The student will do a research. Groups will be conformed in order to perform a debate about the topics that were previously investigated. The professor will moderate the activity.
- Develop a graphic organizer (induction matrix) about the advantages and disadvantages of innovation.
- Develop an executive presentation about a "good idea" (innovation) that the student wishes to implement to make efficient and modernize the selected company.
- Enhance the prospective thinking in the student through an active participation in "Forward Theatre" imparted by the UNAM.
- Practice No.4. In teams, the students develop the "strategic foresight planning of the selected company".
- Working in teams, students give a presentation about the results of the practice "Strategic foresight planning of the selected company".

LEARNING ASSESSMENT

The teacher will make the assessment of these products from: checklists, observation guides and rubrics, among others.

Portfolio of evidence:

- Graphic organizer (induction matrix)
- Debate
- Executive Presentation
- Active Participation
- Practice Report No.4

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CONNECTION WITH PRACTICE

PRACTICE No.	NAME OF PRACTICE	THEMATIC UNITS	DURATION	PLACE
1	Analysis of two of the 11 mentalities to predict the future "Eleven ways to change the way you see – and create- the future" by John Naisbitt and its possible application in the selected company.	I	13.0	Classroom/ Enterprise
2	"Analysis of the technological megatrends applied in a selected organization".	II	9.0	Classroom/ Enterprise
3	"Video about the effects of globalization on Mexican SME's or about environmental crisis in Mexico".	III	13.0	Classroom/ Enterprise
4	"Strategic foresight planning of the selected company".	IV	19.0.	Classroom/ Enterprise/Public institution
			TOTAL OF HOURS	54.0

ASSESSMENT AND ACCREDITATION:

The teacher will make the assessment of these products from: checklists, observation guides and rubrics, among others. It is essential to pass practices for the accreditation of the learning unit and its percentages of accreditation are:

Practice no. 1	40%
Practice no. 2	35%
Practice no. 3	45%
Practice no. 4	35%



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LEARNING UNIT:

Analysis of management megatrends

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ASSESSMENT PROCEDURE

TERM	UNIT	ASSESSMENT PROCEDURE
1	I & II	Continuous assessment 100%
2	III	Continuous assessment 100%
3	IV	Continuous assessment 100%
	Unit I.	25% of the total of the final evaluation.
	Unit II.	25% of the total of the final evaluation.
	Unit III.	25% of the total of the final evaluation.
	Unit IV.	25% of the total of the final evaluation.

The student has the opportunity to approve the learning unit by:

- The evaluation of previously acquired knowledge in which the student should show mastery of competencies in the learning unit, integrating their knowledge (ex. learning how to know, do, be and live together) according to the criteria established by the academy.
- Study in other national or international institutions of higher education that have a mobility agreement with IPN.

KEY	B	C	REFERENCES
1	X		A Yáñez-Arancibia, R Dávalos-Sotelo, J W Day and E Reyes. (2013). Ecological Dimensions for Sustainable Socio Economic Development. WITpress. ISBN: 978-1-84564-756-8
2	X		Christensen, Clayton M. (2013). The Innovator's Dilemma: When new technologies cause great firms to fail. HBS PRESS BOOK. ISBN: 11961-HBK-ENG
3	X		Edmondson, Amy. (2012). Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy. Integra Ediciones. ISBN:1118216768, 9781118216767
4	X		Ghemawat, Pankaj. (2011). World 3.0: Global Prosperity and How to Achieve It. HBS PRESS BOOK. ISBN:12314-HBK-ENG
5	X		Godet, Michel and Durance, Philippe. (2011). Strategic Foresight for Corporate and Regional Development. DUNOD - UNESCO - Fondation Prospective et Innovation.
6		X	Kotter, John and Whitehead, Lorne. (2010). Buy-In: Saving Your Good Idea from Getting Shot Down. HBS PRESS BOOK. ISBN:12703-HBK-ENG
7	X		Morace, Francesco. (2012). Paradigms of the future a trend exploration. Nomos Ediciones. ISBN:987-88-88145-75-4
8	X		Naisbitt, John & Aburdene, Patricia. (2008). Re-Inventing the Corporation: Transforming Your Job and Your Company for the New Information Society. Little Brown & Co. ISBN 13: 9780446512848
9	X		Naisbitt, John. (2009). Mind Set! Eleven ways to change the way you see-and create-the future. New York: Harper Collins Publisher. ISBN: 9780061860553
10	X		Reig, Dolores y Vilchez, Luis F. (2013). Los jóvenes en la era de la hiperconectividad: tendencias, claves y miradas. Madrid, Fundación encuentro. ISBN:978-84-89019-40-9
11	X		Rosales, Pere (2010), Estrategia digital: Cómo usar las nuevas tecnologías mejor que la competencia. DEUSTO Ediciones, ISBN: 9788423427673
12	X		Tapscott, Don. (2014). The Digital Economy: Promise and Peril In The Age of Networked Intelligence. USA: Editorial McGraw-Hill. ISBN: 0071835555 / 9780071835558
13		X	Tecnológico de Monterrey. (2009). Las megatendencias tecnológicas actuales y su impacto en la identificación de oportunidades estratégicas de negocios. México: Ediciones ITESM. ISBN:978-607-7517-26-9
			ON LINE REFERENCES
14	X		Baena, Guillermina & Montero, Alethia. (2013). Planeación prospectiva estratégica: Técnica del Teatro del Devenir. México. UNAM. Revised on September 23, 2014 from: http://investigacion.politicas.unam.mx/semprospectiva/docs/workingpapers/p7_2013.pdf
15	X		Baena, Guillermina. (2009). Construcción de escenarios y toma de decisiones. México. UNAM. Revised on September 23, 2014 from: http://investigacion.politicas.unam.mx/semprospectiva/docs/workingpapers/wp12.pdf
16	X		Caraballo, Luis G. (2013). El Método Prospectivo y la Interacción Estratégica en los Tiempos de Negocios. Venezuela. UNAM. Revised on September 23, 2014 from: http://investigacion.politicas.unam.mx/semprospectiva/docs/cuadernos/cuaderno_prospectiva5.pdf
17	X		Película "Pirates of Silicon Valley". Revised on September 23, 2014 from: http://vimeo.com/55439991
18	X		Serbolov, Yuri. (2009). Prospectiva de la Prospectiva. México. Carpeta purpura. Revised on September 23, 2014 from: http://www.academia.edu/7141496/Prospectiva_de_la_Prospectiva_17
19	X		Video "A Sustainable World - Tokio: laboratorio del futuro". Revised on September 23, 2014 from: http://www.youtube.com/watch?v=RZqoc48iZ1c

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TEACHING FOR LEARNING UNIT PROFILE

1. GENERAL INFORMATION

ACADEMIC UNIT: ESCUELA SUPERIOR DE COMERCIO Y ADMINISTRACIÓN, UNIDAD SANTO TOMÁS

ACADEMIC PROGRAM: Bachelor's Degree in Administration and Entrepreneurial Development **LEVEL:** IV

TRAINING AREA:	Institutional	Scientific Basic	Professional	Terminal and Integration

ACADEMY: Management and Business


LEARNING UNIT: Analysis of management megatrends

SPECIALITY AND ACADEMIC LEVEL REQUIRED: Management or related (minimum Bachelor's degree).

2. PURPOSE OF LEARNING UNIT:

Generates integral strategies for growth, consolidation and permanence of the organization based on foresight planning.

3. EDUCATIONAL PROFILE:

KNOWLEDGE	PROFESSIONAL EXPERIENCE	TEACHERS SKILLS	ATTITUDES
Business administration Business Management Business development based on prospective studies Minimum English Level B2 on the Common European Framework of Reference for Languages (CEFR) Institutional Education Model	Minimum 2 years of experience in business administration or related disciplines Minimum 1 year of undergraduate teaching	Dominance of teaching methods like autonomous and collaborative learning Knowledge of diverse teaching resources Implementation of the Institutional Educational Model	Respectful Responsible Committed Tolerant Proactive  SECRETARÍA DE EDUCACIÓN PÚBLICA INSTITUTO POLITÉCNICO NACIONAL DIRECCIÓN DE EDUCACIÓN SUPERIOR

DEVELOPED

Armando Rentería López, M.S.

REVIEWED

Nadina Olinda Valentin Kajatt, M.S.
Academic Assistant Director

AUTHORIZED

Manelic Maganda de los Santos, P.A.
Unit Director

DATE: 2015