Industrial Design Degree

Objective
To form a professional able to project innovative system objects, feasible to be manufactured, to be incorporated on its environment through collaborative and multidisciplinary job. Interpreting culture, environmental factors and technological possibilities, considering human factors as physical as cognitively, emotional of social groups to improve life quality.

Profile of the applicant
Knowledges:
- Maths, Spanish, Natural and Social Sciences
- Physics
- Humanities
- Economic and Administrative Sciences

Abilities:
- Drawing skills
- Manual and constructive skills
- Space perception
- Mathematical and logical reasoning

Attitudes:
- Auspicious to read
- Auspicious to observe
- Auspicious to reflect
- Initiative
- Team work
- Auspicious to research.

Profile of the graduated
Knowledges:
- Ideal, natural and social sciences to interpret and contextualize a reality on objects development
- Theories that support industrial design process to base its process
- Strategies for development of industrial design projects
- Administrative disciplines to manage industrial design projects
- Legal aspects related to industrial design projects, to apply normatively trough objects creations and its intellectual protection
- Technologies to create solutions on industrial design cases
- Creative techniques for creativity development
- Form and composition aspects to structure industrial design objects
- Usability aspects to center projects on users
- Design and art history to interpret a reality on objects development
- Symbolic language to communicate industrial design concepts
- Graphic language and volumetric construction to communicate industrial design projects
- Global development models to interpret a reality and develop prospective thought
- Production processes and material technologies to determining feasibility and innovation in the development of projects

Abilities:
- To size the implications of the objects in their context, to give pertinent answers in industrial design projects
- Develop prospective projects to interpret the present an generate future scenarios
- To manage industrial design projects to institutional linking
- Manage design projects to make industrial design activity profitable
- Creative to generate innovations
- To recognize and construct the symbolic charge of an object to endow it whit its significance
- Of interpreting and building three dimensional objects manually and digitally, for their graphic communication
- To represent objects in two and three-dimensions manually and digitally, for their graphic communication.
- Use of information technologies to communicate efficiently
- To listen, speak, write and read, with emphasis on basic academic purposes in a second language
- To handle materials in model building
- Apply sustainability in industrial design projects
- To transfer the knowledge of structural criterion to the objects of design
- Development of autonomous work
- Research using different tools

Attitudes:
- Interest to discover new opportunities to design
- Interpersonal relationships to collaborative work

- Open to changes
- Critical and self-critical
- Enterprising and purposeful
- Leadership
- Favorable for multidisciplinary and collaborative work
- Social, cultural and environmental responsibility
- Reflective
- Favorable to research
- To work whit discipline
- Empathic
- Innovative
- Self-learning to generate and manage his/her own knowledge
- Ethical

Values:

- Described in UAA ideology

Areas of employment

- Consultant on public and private sectors.
- Creator of their own business, developing strategies to produce and market their own products
- Private sector through products development and design services provider
- Public sector, in the areas of health, urban equipment, agriculture, museography, etc.

Permanence

Eight semesters

Curriculum

Plan 2010
Career 29

First semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Design background	4		8	C. DIS. Y CONST	DTM
Strategies for design I	4		8	C. DIS. Y CONST	DIP
Configuration workshop	3	6	12	C. DIS. Y CONST	DIP
Introduction to materials	2	6	10	C. DIS. Y CONST	DMP
Graphic representation	2	4	8	C. DIS. Y CONST	DR
Geometry of form I	2	4	8	C. DIS. Y CONST	DR

Second semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Design history	4		8	C. DIS. Y CONST	DTM
Strategies for design II	2	2	6	C. DIS. Y CONST	DIP
Objects conceptualization workshop	2	7	11	C. DIS. Y CONST	DIP
Technology for standardized materials I	2	6	10	C. DIS. Y CONST	DMP
Geometry of form II	1	5	7	C. DIS. Y CONST	DR
Drawing normativity	2	4	8	C. DIS. Y CONST	DR

Third semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Esthetics in the objects	4		8	CCDC / CCSH	DTH / PHIL
Ergonomics applied to the product	2	2	6	C. DIS. Y CONST	DIP
Industrial design workshop I (use/function)	2	7	11	C. DIS. Y CONST	DIP
Technology for standardize materials II	2	6	10	C. DIS. Y CONST	DMP
CAD I	1	3	5	C. DIS. Y CONST	DR
Analytical sketching	1	5	7	C. DIS. Y CONST	DR

Fourth semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Anthropometry and biomechanics laboratory		4	4	C. DIS. Y CONST	DIP
Industrial design workshop II (use/function)	2	7	11	C. DIS. Y CONST	DIP
Technology for mouldable materials	2	6	10	C. DIS. Y CONST	DMO
Introduction to structures	2	4	8	C. DIS. Y CONST	DCE
CAD II	1	3	5	C. DIS. Y CONST	DR
Models	1	5	7	C. DIS. Y CONST	DMP
Introduction to entrepreneurship	4		8		ADM BAS

Fifth semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Philosophy for design	4		8	C. SOL. Y HUM.	PHIL
Design and sustainability	3	1	7	C. DIS. Y CONST	DIP
Industrial design workshop III (socioeconomic context)	2	7	11	C. DIS. Y CONST	DIP
Alternative energies	2	3	7	C. BASICAS	DSE
Digital photography	2	4	8	C. DIS. Y CONST	DMP
Introduction to marketing	4	2	10	C. ECO. ADMVA.	MARK

Sixth semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Professional ethics	3		6	C. SOL. Y HUM.	PHIL
Research workshop for innovation	2	2	6	C. DIS. Y CONST	DTM
Industrial design workshop IV (socioeconomic context)	2	7	11	C. DIS. Y CONST	DIP
Experimental project workshop	1	3	5	C. DIS. Y CONST	DIP
Industrial production	2	4	8	C. ECO. ADMVA.	REC HUM
Introduction to packaging design	2	4	8	C. DIS. Y CONST	DTM
Marketing and new product development	3	1	7	C. ECO. ADMVA.	MARK

Seventh semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Paradigms and design discourses	3		6	C. DIS. Y CONST	DTM
Industrial design integral workshop I	2	7	11	C. DIS. Y CONST	DIP
Financial feasibility for industrial design projects	2	4	8	C. ECO. ADMVA.	FIN
Professionalizing optative subject II	2	4	6/8		
Free optative subject			16		

Eighth semester

Subject	Theoretical hours	Practice hours	Credits	Center	Department
Industrial design integral workshop II	2	7	11	C. DIS. Y CONST	DIP
Legal aspects of design	3		6	C. ECO. ADMVA.	DER
Professionalizing optative subject I	2	4	7/8		
Free optative subject			16		

Professionalizing optative subjects

Emphasis: Industrial products design

Seventh semester

Industrial products design	2	4	8	C. SOC. Y HUM	DIP

Eighth semester

Workstations design	2	4	8	C. DIS. Y CONST	DIP

Emphasis: Business development
Seventh semester

Management skills	2	2	6	C. ECO. ADMVA.	A. BAS

Eighth semester

Business project	2	3	7	C. ECO. ADMVA.	A. BAS

Emphasis: Packaging design
Seventh semester

Packaging design I	2	4	8	C. DIS. Y CONST	DIP

Eighth semester

Packaging design II	2	4	8	C. DIS. Y CONST	DIP

Institutional programs

- Professional practices
- Social service
- Tutorials
- Mobility and academic exchange
- Promotion of foreign languages
- Humanist training program

Degree requirements

I. Have met the social service requirements
II. Check that student do not have any debts with the Autonomous University of Aguascalientes
III. To have covered with the quota settled down in the arbitration plan to get the title
IV. To have presented graduates exam
V. To have accredited a second language

In addition to the above requirements, the graduate must cover the following aspects:

- 9 credits of humanist training
- 240 hours of professional practices