

FEDERAL UNIVERSITY OF CEARÁ OFFICE OF THE VICE PROVOST FOR UNDERGRADUATION (PROGRAD) COORDINATION FOR PROJECT AND CURRICULUM DEVELOPMENT CURRICULUM DEVELOPMENT DIVISION

1. Academic unit offering the curricular component (Faculty, Center, Institute, Campus):

Center of Technology

2. Department offering the curricular component (when applicable):

Teleinformatics Engineering Department

3. Undergraduate course(s) offering the curricular component						
Code of		Course Degree ¹	Curriculum	Nature	Semester	
the	Name of the Course		(Year/	of the	of Offer ³	Habilitation ⁴
Course			Semester)	Component ²		
91	Telecommunications Engineering	Bachelor	2015.1	Mandatory	06	-

4. Name of the curricular component:

Integrated Actions in Science and Technology I

5. Code of the curricular component (filled by PROGRAD): TI0135

6. Prerequisites	No ()	Yes (x)		
		Code Name of the curricular component / activity		
		TI0119 Digital Signal Processing		

7. Corequisite	No (x)	Yes ()		
		Code	Name of the curricular component / activity	

8. Equivalences	No ()	Yes (x)		
		Code	Name of the curricular component / activity	
		TI0044 Programming Techniques for Engineering I		

9. Day period of the curricular component (more than one option can be selected):(x) Morning(x) Afternoon(x) Night

- ¹ Fill with Bachelor (Engineer), Licenciate, or Technologist.
- ² Fill with *Mandatory*, *Optional*, or *Elective*.
- ³ Fill when mandatory.
- ⁴ When elective, fill with the habilitation or emphasis to which the curricular component is linked.

10. Regime of the curricular component:						
(x) Semester	() Yearly	() Modular				

11. Justificatory for the creation/regulamentation of this curricular component

The Integrated Activities in Science and Technology (AICT) constitute a set of activities that aims to provide the student with the minimum maturity required to integrate the knowledge acquired in the Engineering Sciences curricular components with those of Engineering, in a progressive and controlled form, promoting a higher capacity of performing individually or with assistance the integration of the contents of in-depth materials within the framework of the binomial theory-practice.

12. Syllabus:

Variable programmatic content.

13. Workload description							
Number of	Number of	Total Workload in	Theory	Practice Workload			
Weeks:	Credits:	Hours:	Workload in	in Hours:			
16	02	32	Hours:	16			
			16				

14. Basic bibliography:

- 1- Livros and artigos científicos referentes ao tema escolhido.
- 2- Fundamentos de Metodologia Científica; Marina de Andrade Marconi and Eva Maria Lakatos; 7th edition; Editora Atlas, 2010.
- 3- Fundamentos de Metodologia Um Guia para a Iniciação Científica; Aidil Jesus Paes de Barros and Neide Aparecida de Souza Lehfeld; 2nd edition; Makron Books, 2000.
- 4- Metodologia Científica; Amado L. Cervo, Pedro A. Bervian and Roberto da Silva; 6th edition; Pearson / Prentice Hall, 2006.

15. Complementary bibliography:

- 1- Metodologia para a Pesquisa and Desenvolvimento; Carlos Fernando Jung; 1st edition; Axcel, 2004.
- 2- The Art of Scientific Investigation; William I. B. Beveridge; Blackburn Press; 2004.
- 3- Scientific Method in Practice; Hugh G. Gauch Jr.; Cambridge University Press; 2002.
- 4- An Introduction to Scientific Research; E. Bright Wilson Jr.; Dover Publications; 1991.
- 5- Scientific Integrity; Francis L. Macrina; 3rd edition; ASM Press; 2005.