<table>
<thead>
<tr>
<th><strong>PHD PROGRAMME:</strong></th>
<th><strong>INDUSTRIAL ENGINEERING</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRESIDENT:</strong></td>
<td>MENGALI GIOVANNI</td>
</tr>
<tr>
<td><strong>SUBJECT AREAS:</strong></td>
<td>ING-IND/03, ING-IND/04, ING-IND/05, ING-IND/06, ING-IND/07, ING-IND/12, ING-IND/13, ING-IND/14, ING-IND/15, ING-IND/16, ING-IND/17, ING-IND/18, ING-IND/19, ING-IND/20, ING-IND/21, NG-IND/22, ING-IND/23, ING-IND/24, ING-IND/25, ING-IND/26, ING-IND/27, ING-IND/34, ING-IND/35, ICAR/05</td>
</tr>
<tr>
<td><strong>DEPARTMENT:</strong></td>
<td>Department of Ingegneria civile e industriale Largo Lucio Lazzarino 2 56122 Pisa</td>
</tr>
</tbody>
</table>
| **ADMISSION REQUIREMENTS:** | Master’s degree (Ante DM 509) in: Physics, Engineering, Chemistry and Sciences  
Master’s degree (DM 270) in:  
LM-17 Fisica  
LM-20 Ingegneria aerospaziale e astronautica  
LM-21 Ingegneria biomedica  
LM-22 Ingegneria chimica  
LM-23 Ingegneria civile  
LM-25 Ingegneria dell’automazione  
LM-26 Ingegneria della sicurezza  
LM-27 Ingegneria delle telecomunicazioni  
LM-28 Ingegneria elettrica  
LM-29 Ingegneria elettronica  
LM-30 Ingegneria energetica e nucleare  
LM-31 Ingegneria gestionale  
LM-33 Ingegneria meccanica  
LM-35 Ingegneria per l’ambiente e il territorio  
LM-53 Scienza e ingegneria dei materiali  
LM-54 Scienze chimiche  
LM-71 Scienze e tecnologie della chimica industriale  
LM-75 Scienze e tecnologie per l’ambiente e il territorio  
Master’s Degree (DM 509) in:  
20/S (specialistiche in fisica)  
25/S (specialistiche in ingegneria aerospaziale e astronautica)  
26/S (specialistiche in ingegneria biomedica)  
27/S (specialistiche in ingegneria chimica)  
28/S (specialistiche in ingegneria civile)  
29/S (specialistiche in ingegneria dell’automazione)  
30/S (specialistiche in ingegneria delle telecomunicazioni)  
31/S (specialistiche in ingegneria elettrica)  
32/S (specialistiche in ingegneria elettronica)  
33/S (specialistiche in ingegneria energetica e nucleare)  
34/S (specialistiche in ingegneria gestionale)  
35/S (specialistiche in ingegneria informatica)  
36/S (specialistiche in ingegneria meccanica)  
38/S (specialistiche in ingegneria per l’ambiente e il territorio)  
61/S (specialistiche in scienza e ingegneria dei materiali)  
62/S (specialistiche in scienze chimiche)  
81/S (specialistiche in scienze e tecnologie della chimica industriale)  
82/S (specialistiche in scienze e tecnologie per l’ambiente e il territorio) |
<p>| <strong>OUTCOME OF THE SELECTION PROCEDURE:</strong> | Ranking of candidates for the whole Ph.D. programme |
| <strong>PHD POSITIONS AVAILABLE:</strong> | 10 |</p>
<table>
<thead>
<tr>
<th>DETAIL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 with grant</td>
<td>Of which reserved to students graduated from a foreign university: 0</td>
</tr>
<tr>
<td>1 without grant</td>
<td></td>
</tr>
<tr>
<td>DETAILS:</td>
<td>6 grants financed by the University of Pisa</td>
</tr>
<tr>
<td></td>
<td>1 financed by Dipartimento di Ingegneria Civile e Industriale on subject: “Ultra-short impulses laser processing for mechanical engineering applications”</td>
</tr>
<tr>
<td></td>
<td>1 financed by Nuova Pignone s.r.l. on subject: “Repairing methods and fatigue characterization of components of alternative compressors”</td>
</tr>
<tr>
<td></td>
<td>1 financed by Centro di ricerca “E. Piaggio” on subject: “Modellistica e controllo ottimo dei sistemi multi-body con contatti intermittenti con particolare riferimento alla manipolazione robotica in presenza di incertezza”</td>
</tr>
<tr>
<td>SELECTION CRITERIA:</td>
<td>CURRICULUM:</td>
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<tr>
<td></td>
<td>The curriculum must be uploaded during the application process. The curriculum must provide information about the candidate’s academic education as well as his/her professional and research experience. Any other documents useful towards the assessment of the candidate’s curriculum should be attached.</td>
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<tr>
<td></td>
<td>Minimum grade: 18 out of 30</td>
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<td></td>
<td>The list of candidates who are invited to take a written examination will be published at: <a href="http://dottorato.unipi.it/%E2%80%9CAdmissions%E2%80%9D">http://dottorato.unipi.it/“Admissions”</a> should take place at least one week before the written examination.</td>
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<tr>
<td></td>
<td>Written Examination:</td>
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<tr>
<td></td>
<td>Date: 18th September 2014 Time: 09:00</td>
</tr>
<tr>
<td></td>
<td>Place: ex Facoltà d’Ingegneria (room A28), Largo Lucio Lazzarino, Pisa (Italy)</td>
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<tr>
<td></td>
<td>Minimum grade: 18 out of 30</td>
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<td></td>
<td>Interview:</td>
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<td></td>
<td>The interview will assess the candidate’s knowledge and curriculum. The candidate should show aptitude for research, openness to international academic experiences and an interest in scientific research.</td>
</tr>
<tr>
<td></td>
<td>Date: 19th September 2014 Time: 09:00 (and following days)</td>
</tr>
<tr>
<td></td>
<td>All candidates must be present on the first day of meetings to find out when the interview has been scheduled.</td>
</tr>
<tr>
<td></td>
<td>Where: ex Facoltà d’Ingegneria (room A28), Largo Lucio Lazzarino, Pisa (Italy)</td>
</tr>
<tr>
<td></td>
<td>Minimum grade: 18 out of 30</td>
</tr>
<tr>
<td></td>
<td>Webconference NO</td>
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<tr>
<td>GUIDELINES FOR THE PRESENTATION OF THE PHD RESEARCH PROJECT</td>
<td>REQUIRED NO</td>
</tr>
</tbody>
</table>
EDUCATIONAL INFORMATION:

Description and main objectives of the course:
The Ph.D. Course is divided into curricula to take into account the vastness, variety and complexity of the theoretical, methodological and experimental research themes it contains. The common objective of the different curricula is to train experts with a high scientific profile, able to operate in the research and development of various areas of Industrial Engineering. The curricula are differentiated in terms of characterizing research subjects such as structures and aerospace materials, fluid dynamics, flight mechanics, space propulsion (curriculum of Aerospace Engineering), application of nuclear technology, safety methodologies and environmental protection (curriculum of Nuclear Engineering and Industrial Safety), chemistry and materials, sustainable development, safety and optimization of systems, energy production processes with renewable energy (curriculum of Chemical Engineering and Materials), advanced planning, experimentation, production, management, life extension or recycle of machines, plants and mechanical systems (curriculum of Mechanical Engineering), project, experimentation, building and employment of terrestrial vehicles and transport systems (curriculum of Engineering of Vehicles and Transport Systems).

Web site: www.dici.unipi.it (under construction)