



**"Annex 1" updated on 18<sup>th</sup> may 2020**

**(The updates and the corrections are highlighted in red colour)**

**(ANNEX 1)**

**CALL FOR PHD POSITIONS – 36<sup>th</sup> CYCLE  
PHD PROGRAMME in INNOVATION FOR THE CIRCULAR ECONOMY**

<b>PhD Programme Coordinator</b>	Prof. Francesco Quatraro
<b>Department</b>	Economics and Statistics Cognetti de Martiis
<b>PhD Programme duration</b>	3 years
<b>PhD website</b>	<a href="http://inno-ce.campusnet.unito.it">http://inno-ce.campusnet.unito.it</a>
<b>Course start date</b>	1 <sup>st</sup> October, 2020
<b>Departments involved in PhD programme</b>	Economics and Statistics Cognetti de Martiis; Culture, Politics and Society; Chemistry; Computer Science; Agricultural, Forestry and Food Sciences; Management Engineering (Polytechnic of Milan)

<b>Positions offered<sup>1</sup> by the PhD Programme</b>	
n. 4 positions with scholarship, of which n. 1 reserved to candidates with international qualifications	of which: - 4 scholarships funded by the University of Torino
n. 3 positions reserved to employees of private companies or public bodies	of which: - 3 positions reserved to employees of WARRANT HUB S.P.A.
<i>. 1 apprenticeship position for Higher Training and Research with ECOPACK S.p.A. (subject to approval by the Regione Piemonte (Piedmont Region). This position is linked to specific research topic)</i>	

<sup>1</sup> All additional scholarships and apprenticeship contracts (Legislative Decree no. 81/2015 art.45), which may become available after the publication of this Call, will be announced on the University websites [Dottorati di Ricerca](#) and [PhD](#) until Call's deadline.



n. 2 positions without financial support

## CALL FOR ALL POSITIONS

### Admission procedure

Assessment of qualifications, research project and interview

### Qualifications to be uploaded in the online application

- Abstract thesis of Master'S Degree
- Publications (max. 6)
- Research project

### Assessment criteria

**Maximum score 100 points**

#### Assessment of qualifications

**Maximum score 45 points**

**Final grade of Laurea/ second cycle degrees (or weighted average of list of examinations taken during the Laurea Triennale/1<sup>st</sup> cycle degree and Laurea Magistrale/2<sup>nd</sup> cycle degree for candidates applying under condition):**

Maximum score 30 points

106-110 (cum laude): max. 30 points  
from 101 to 105: max. 25 points  
from 96 to 100: max. 20 points  
from 91 a 95: max. 15 points  
<= 90: max. 10 points

#### **For applicants holding an international qualification**

Curriculum Studiorum (as per information provided in the online application and transcripts)

**Abstract thesis of Master degree**  
(max. 2500 characters)

Maximum score 5 points

#### **Publications and other qualification**

- Publications: max 8 points  
- Other qualifications: max. 2 points

Maximum score 10 points

#### **Minimum threshold for admission to the next step**

**30 points**

#### **Research project**

**Maximum score 25 points**

#### **Minimum threshold for admission to the interview**

**15 points**

#### **Interview**

**Maximum score 30 points**

#### **Minimum threshold for passing the interview**

**20 points**

**Further information about the examination:**

The research project (max 10.000 characters) must be written in English or in Italian by the candidate choosing a title within those offered by the PhD Programme

The interview will be focusing on topics concerning environmental sustainability, circular economy models, and the related enabling technologies.

The relevant disciplinary domains will include economics, sociology, computer science and chemistry, based on the Curriculum Studiorum and the documented experience of the candidate.

**Titoli progetti di ricerca  
Dottorato di Ricerca in Innovation for the Circular Economy**

**Titles of research project  
PhD Programme in Innovation for the Circular Economy**

- 1) Trasformazione Digitale ed Economia Circolare / Unveiling the convergence between Digital Transformation and Circular Economy (supervisor: Prof. Francesco Quatraro)
- 2) Innovazione ed economia circolare: brevettazione strategica in scenari globalizzati / Innovation for the Circular Economy: patent races in the global arena / (supervisor: Prof. Francesco Quatraro)
- 3) Il Green Deal e le nuove Politiche di Coesione: la dimensione regionale dell'economia circolare / The Green Deal and the new course for Cohesion Policy: the regional dimension of circular economy dynamics (supervisor: Prof. Francesco Quatraro)
- 4) "Cambiamento climatico come rischio d'impresa emergente: impatto sull'accesso al mercato dei capitali e sul costo delle fonti di finanziamento" / "Climate Change as an Emerging Risk: Impact on the Financial Market and the Cost of Capital" (supervisor: Prof. Vera Palea).
- 5) Economia Circolare, sostenibilità e diversità territoriale / Circular economy, sustainability, and territorial diversity (supervisor: Prof. Filippo Barbera)
- 6) Nuovi catalizzatori eterogenei ecosostenibili e tecnologie di intensificazione di processo per lo sviluppo di protocolli sintetici industriali / New eco-sustainable heterogeneous catalysts and enabling technologies for the development of industrial synthetic protocols (supervisor: Prof. Maela Manzoli)
- 7) Economia Circolare e politiche pubbliche / Circular economy and public policies (supervisor: Prof Stefania Ravazzi)



## UNIVERSITÀ DEGLI STUDI DI TORINO

- 8) Il riutilizzo dell'acqua su scala locale; un'analisi multi-approccio. / The water reuse at local scale; a multi-approach analysis. (supervisor: Prof. Bianco-Prevot)
- 9) Approccio integrato ecosostenibile finalizzato al riutilizzo di materiale di scarto per il recupero ambientale di suoli e corpi idrici. / Integrated sustainable approach aimed to use exhausted materials for achieving the environmental recovery of soils and water bodies. (supervisor: Prof. Calza)
- 10) Studio e valorizzazione degli scarti di una filiera agroindustriale piemontese per la creazione di una economia circolare di comunità / Analysis and valorization of the waste from a Piedmontese agro-industrial chain toward the formation of a circular economy community (supervisor: Prof. Zanetti/Barolo)
- 11) Studio modellistico di materiali e processi per la cattura ed il riciclo della CO<sub>2</sub>/ Modelling of materials and processes for CO<sub>2</sub> capture and recycling. (supervisor: Prof. Ricchiardi)
- 12) Al di là della corporate social responsibility: presupposti, linee guida, dibattiti / Beyond corporate social responsibility: building blocks, guidelines, debates (supervisor: prof. Manuela Ceretta)
- 13) Green economy, innovation and the digital transformation: barriers and opportunities. *(research project linked to the position reserved to employees of WARRANT HUB S.P.A.)*
- 14) Digital revolution for the circular economy: economic and technological challenges. *(research project linked to the position reserved to employees of WARRANT HUB S.P.A.)*
- 15) Digital technologies for the green transition: exploring the role of sustainable finance. *(research project linked to the position reserved to employees of WARRANT HUB S.P.A.)*
- 16) Sviluppo di materiali innovativi e relativi processi per il packaging alimentare a base di cellulosa in un'ottica di economia circolare. *(titolo di ricerca abbinato a posto in apprendistato presso ECOPACK S.p.A.)*
- 17) Ecosistemi innovativi per lo sviluppo della circular economy / Innovation ecosystems for the transition to a Circular Economy. (supervisor prof. Pironti)