

## CONSIGLIO DI CORSO DI STUDIO IN ENERGY ENGINEERING

Repertorio n.

del 02/02//23

Pag. 1

Padova, lì 02/02/23

Il giorno 02 febbraio 2023 alle ore 14:30 si è riunito il Consiglio del Corso di Laurea Magistrale in Energy Engineering LM-30 presso la Sala Riunioni Grande, di Via Venezia 1.

Presiede la seduta il prof Davide Del Col, assume le funzioni di Segretario la prof.ssa Anna Stoppato.

La posizione dei membri del Consiglio è al seguente:

qualifica	cognome	nome	P	G	A
RO	<b>Bezzo</b>	<b>Fabrizio</b>	X		
RTD	<b>Bortolin</b>	<b>Stefano</b>	X		
RO	<b>Canu</b>	<b>Paolo</b>			X
RTD	<b>Carraro</b>	<b>Gianluca</b>	X		
RO	<b>De Carli</b>	<b>Michele</b>	X		
RO	<b>Del Col</b>	<b>Davide</b>	X		
RO	<b>Lazzaretto</b>	<b>Andrea</b>	X		
RA	<b>Lorenzoni</b>	<b>Arturo</b>		X	
RTD	<b>Ortombina</b>	<b>Ludovico</b>	X		
RA	<b>Pavesi</b>	<b>Giorgio</b>	X		
RA	<b>Pertile</b>	<b>Marco</b>	X		
RTD	<b>Rampazzo</b>	<b>Mirco</b>	X		
PC	<b>Rossetto</b>	<b>Luisa</b>	X		
RA	<b>Stoppato</b>	<b>Anna</b>	X		
RTD	<b>Trivellin</b>	<b>Nicola</b>		X	
RO	<b>Turri</b>	<b>Roberto</b>	X		
RA	<b>Zarella</b>	<b>Angelo</b>		X	
RA	<b>Zollino</b>	<b>Giuseppe</b>		X	
ST	<b>Gavin</b>	<b>Martina</b>	X		
ST	<b>Licheri</b>	<b>Paolo</b>	X		
ST	<b>Alizai</b>	<b>Muhammad Taha</b>	X		

RO	Professore Ordinario	RTD	Ricercatore a tempo determinato
RA	Professore Associato	PTA	Rappresent Personale tec-amministrativo
PC	Professore a contratto	ST	Rappresentante degli studenti

È inoltre presente, invitato dal Presidente, lo studente Simone Peccolo, membro del GAV.

Alle ore 14:35 il Presidente verificato il superamento del numero legale, dichiara aperta la seduta per trattare, come dall'avviso di convocazione, l'ordine del giorno di seguito indicato.

FIRMA DEL PRESIDENTE  
Prof. Davide Del Col

FIRMA DEL SEGRETARIO  
Prof.ssa Anna Stoppato

**CONSIGLIO DI CORSO DI STUDIO IN ENERGY ENGINEERING**

Repertorio n.

del 02/02//23

Pag. 2

**ORDINE DEL GIORNO**

- 1. Comunicazioni**
- 2. Presa d'atto del verbale della seduta precedente**
- 3. Modifica offerta formativa**
- 4. Erogazione del 10% di didattica online**
- 5. Programmazione didattica:**
  - **Offerta didattica coorte 2023/2024**
  - **Manifesto delle attività didattiche e coperture degli insegnamenti 2023/24**
  - **Schema di piano ad approvazione automatica**
  - **Delega per eventuale completamento delle coperture**
- 6. Pratiche studenti**

FIRMA DEL PRESIDENTE  
Prof. Davide Del Col

FIRMA DEL SEGRETARIO  
Prof.ssa Anna Stoppato

## CONSIGLIO DI CORSO DI STUDIO IN ENERGY ENGINEERING

Repertorio n.

del 02/02//23

Pag. 3

**OGGETTO 1 - Comunicazioni****a. Nuovi rappresentanti studenti biennio accademico 2022 - 2024**

Il Presidente informa che nei giorni 6 e 7 dicembre 2022 si sono svolte le elezioni per le rappresentanze studentesche nei Consigli dei Corsi di studio. Per il Corso di Laurea magistrale in Energy engineering sono risultati eletti gli studenti Gavin Martina, Licheri Paolo e Alizai Muhammad Taha. Il Presidente si congratula con i rappresentanti eletti.

**b. Immatricolazioni a.a. 2022 - 2023**

Il presidente informa che per la coorte 2022/2023 il nostro CdS presenta 144 immatricolati di cui 74 con titolo straniero (fonte Statimma) in aumento rispetto all'anno 2021/2022 (114 iscritti di cui 38 con titolo straniero- fonte Statimma). Si ricorda che il termine per immatricolarsi in corso d'anno per gli studenti italiani è scaduto il 31/01.

**c. Candidature studenti internazionali AA. 2023/24**

Per quanto riguarda le domande da parte degli studenti extra-UE per l'AA 2023/24, con la prima call che si chiude il 2 febbraio, sono pervenute circa 200 domande. Quest'anno sono stati introdotti - a livello di Ateneo - dei requisiti di GPA minimo differenziati per Paese di provenienza (allegato).

Una seconda call per studenti extra-UE si aprirà dal 2 marzo fino al 2 maggio.

**d. Registri didattici**

Il Presidente ricorda l'importanza della compilazione dei registri didattici per gli insegnamenti del primo semestre, anche per permettere al settore Didattica di procedere con le relative pratiche amministrative e con il pagamento di contratti di insegnamento e affidamenti retribuiti.

FIRMA DEL PRESIDENTE  
Prof. Davide Del Col

FIRMA DEL SEGRETARIO  
Prof.ssa Anna Stoppato

**CONSIGLIO DI CORSO DI STUDIO IN ENERGY ENGINEERING**

Repertorio n.

del 02/02//23

Pag. 4

**OGGETTO 2 – Presa d'atto del verbale precedente**

Il verbale della riunione del CCS del 16/11/2022 è stato pubblicato sulla piattaforma STEM del Dipartimento di Ingegneria Industriale. Il Presidente non ha ricevuto alcun rilievo e pertanto chiede al Consiglio di prendere atto del verbale.

**Il Consiglio prende atto.****OGGETTO 3 -Modifica offerta formativa**

Rispetto alla offerta formativa approvata per l'A.A. 2022/23, vengono oggi presentate due proposte di modifica/integrazione.

Il presidente propone di modificare la lingua di erogazione del LABORATORIO DI TERMODINAMICA APPLICATA (3 cfu), attività fino ad oggi erogata in lingua italiana, portandola in lingua inglese. Tale attività viene pertanto sostituita da LABORATORY OF APPLIED THERMODYNAMICS (3 cfu).

Il presidente propone inoltre la mutuazione da LM Ingegneria meccanica del corso APPLIED ACOUSTIC AND DESIGN FOR PRODUCT SOUND QUALITY (6 cfu) che viene proposto a scelta per gli studenti di LM Energy engineering.

La commissione didattica di questo CCS si è riunita per esaminare le proposte e ha dato parere positivo.

Si chiede ora al Consiglio di esprimersi in merito alle modifiche proposte.

LABORATORY OF APPLIED THERMODYNAMICS: modifica lingua di erogazione

**Il Consiglio approva all'unanimità.**

APPLIED ACOUSTIC AND DESIGN FOR PRODUCT SOUND QUALITY: mutuazione

**Il Consiglio approva all'unanimità.**

FIRMA DEL PRESIDENTE  
Prof. Davide Del Col

FIRMA DEL SEGRETARIO  
Prof.ssa Anna Stoppato

## CONSIGLIO DI CORSO DI STUDIO IN ENERGY ENGINEERING

Repertorio n.

del 02/02//23

Pag. 5

**OGGETTO 4 - Erogazione del 10% di didattica online**

Anche per l'anno accademico 23/24 ai Corsi di Laurea e Laurea Magistrale è possibile erogare al massimo un 10% di attività formative in modalità online, a fronte però di una specifica progettualità da sviluppare nei CdS e con un adeguato coordinamento, anche a livello di orario.

Dopo un'attenta analisi dell'esperienza relativa a quest'anno accademico e sentiti i docenti interessati alla iniziativa nel corso del presente anno accademico, si propone di proseguire con l'erogazione del 33 % di lezioni online nell'a.a. 2023/24 per gli insegnamenti obbligatori di:

MEASUREMENTS AND INSTRUMENTATION (1st year, 1st semester), prof. Marco Pertile

ELECTRIC POWER SYSTEMS (1st year, 2nd semester), prof. Roberto Turri

RENEWABLE ENERGY TECHNOLOGIES (2nd year, 1st semester), prof. Davide Del Col

Per questi insegnamenti, resta inteso che le due ore di lezione online siano usufruibili dagli studenti sia in modalità sincrona che asincrona. Le due ore di lezione online verranno collocate in orario in una giornata in cui non sono previste lezioni in presenza per gli studenti del CdS.

Il Consiglio **approva** all'unanimità dei presenti.

**OGGETTO 5 - Programmazione didattica****• Offerta didattica coorte 2023/2024**

Alla luce delle modifiche approvate nel punto 3, il presidente presenta l'offerta formativa per la coorte entrante e apre la discussione. Al termine ne chiede l'approvazione (Allegato 1).

**Il Consiglio approva all'unanimità.**

**• Manifesto delle attività didattiche e coperture degli insegnamenti 2023/24**

Il Presidente illustra l'offerta erogata per il Corso di Laurea Magistrale nell'a.a. 2023/2024 e le coperture avute dai decani come compito istituzionale e bandi proposti (Allegato 2).

Al termine ne chiede l'approvazione.

**Il Consiglio approva all'unanimità.**

FIRMA DEL PRESIDENTE  
Prof. Davide Del Col

FIRMA DEL SEGRETARIO  
Prof.ssa Anna Stoppato

## CONSIGLIO DI CORSO DI STUDIO IN ENERGY ENGINEERING

Repertorio n.

del 02/02//23

Pag. 6

**• Schema di piano ad approvazione automatica**

Il presidente illustra la bozza di schema di piano automatico che si propone per la coorte 2023 (Allegato 3). Lo schema proposto è lo stesso della coorte precedente fatte salve le modifiche approvate al punto 3 della presente riunione. Il presidente apre la discussione e chiede al consiglio di approvare lo schema.

**Il Consiglio approva all'unanimità.****• Delega per eventuale completamento delle coperture**

Preso atto del piano di copertura proposto, il Presidente chiede contestualmente delega per eventuali integrazioni o modifiche che si rendessero necessarie in vista del Consiglio di Dipartimento interamente dedicato alla didattica previsto per l'8 febbraio.

**Il Consiglio approva all'unanimità.****OGGETTO 6 -Pratiche studenti**

Il Presidente informa che la Commissione Pratiche Studenti ha approvato i seguenti piani di studio:

<b>Cognome e Nome</b>	<b>Matricola</b>	<b>Note</b>
Santoluce Cristina	2014997	Piano di studio cartaceo
Tommasini Davide	2038170	Piano di studio cartaceo
Vedda Luca Filippo	2055396	Piano di studio cartaceo
Covolo Davide	2050745	Piano di studio cartaceo

**Il consiglio prende atto.**

Non essendoci altro da deliberare alle ore 16.05 il Presidente ringrazia i partecipanti e dichiara chiusa la seduta.

FIRMA DEL PRESIDENTE  
Prof. Davide Del ColFIRMA DEL SEGRETARIO  
Prof.ssa Anna Stoppato

## Specific entry requirements for qualifications awarded by non-Italian education systems

Updated on 18/01/2023 and valid for A.Y. 23/24

**DISCLAIMER:** The following information is provided for reference only and does not aim to be totally comprehensive; thus **prospective students can apply also if their country is not listed here**. The following table is updated periodically, according to any possible modification or reform that may take place in the corresponding foreign education system.

The decision on whether the qualification submitted complies with the requirements and allows access to the degree programme to which you applied for admission rests with the Admissions & Welcome Unit.

INTERNATIONAL QUALIFICATIONS	BACHELOR'S & SINGLE-CYCLE DEGREES: Entry titles requested for access
<b>INTERNATIONAL BACCALAUREATE (IB)</b>	<ul style="list-style-type: none"><li><i>Diploma of the International Baccalaureate (Diploma Programme):</i> issued by an educational institution recognised by the <i>International Baccalaureate Organization (IBO)</i> meeting the following general requirements:<ul style="list-style-type: none"><li>- at least 24 points in six subjects of choice, 12 of which must be obtained at “<i>Higher Level</i>”;</li><li>- pass awarded in the three principal subjects: <i>Theory of Knowledge (TOK)</i>, <i>Creativity, Action, Service (CAS)</i> e <i>Extended Essay (EE)</i>.</li></ul></li></ul> <p>For further information, please check <a href="#">Annex 2</a> of the Ministerial Circular.</p>
<b>EUROPEAN BACCALAUREATE (EB)</b>	<ul style="list-style-type: none"><li><i>Diploma of the European Baccalaureate:</i> awarded by accredited European Schools: <a href="https://www.eursec.eu/en">https://www.eursec.eu/en</a></li></ul> <p>For further information, please check <a href="#">Annex 2</a> of the Ministerial Circular.</p>

FOREIGN EDUCATION SYSTEM	BACHELOR'S & SINGLE-CYCLE DEGREE: Entry titles requested for access	MASTER'S DEGREE: Entry titles requested for access
<b>ALBANIA</b>	One of the following: <ul style="list-style-type: none"> <li>• <i>Diplomë e Maturës Shtetërore</i></li> <li>• <i>Diplomë e Maturës Shteteröre Profesionale</i></li> </ul>	One of the following: <ul style="list-style-type: none"> <li>• <i>Diplomë Bachelor</i></li> <li>• <i>Diplomë e Nivelit të Parë</i> (first-level diploma) for qualifications before 2007-2008</li> </ul>
<b>ALGERIA</b>	Both requirements must be met <ul style="list-style-type: none"> <li>• <i>Baccalauréat de l'Enseignement Secondaire / شهادة بكالوريا التعليم الثانوي</i> (upper secondary general education)</li> <li>• Average score of 10 or more on Baccalauréat exams</li> </ul>	One of the following: <ul style="list-style-type: none"> <li>• 3-years <i>Licence / الليسانس</i></li> <li>• 4-year <i>Licence</i> of the système classique (prior to 2004)</li> <li>• <i>Diplôme d'Études Supérieures</i> or <i>Diplôme d'Ingénieur</i></li> </ul>
<b>AZERBAIJAN</b>	Both requirements must be met <ul style="list-style-type: none"> <li>• <i>Orta Təhsil Haqqında Attestat / Аттестат о Полном Среднем Общем Образовании</i> (Certificate of Complete Secondary Education)</li> </ul> + one of the option listed on <a href="http://www.unipd.it/en/how-apply">www.unipd.it/en/how-apply</a> under the <i>Apply for a full degree programme &gt; Bachelor's degrees</i> tab	<ul style="list-style-type: none"> <li>• <i>Diplom Bakalavra – Диплом бакалавра</i> (Bachelor's degree)</li> </ul> <b>Further admission requirements for English-taught degree programmes:</b> <ul style="list-style-type: none"> <li>• Minimum GPA of 4 out of 5</li> <li>• Minimum GPA of 80 out of 100</li> </ul>
<b>BANGLADESH</b>	<ul style="list-style-type: none"> <li>• <i>Higher Secondary Certificate</i>, with a final score equal or higher than Second Division</li> <li>• <i>Diploma</i> (vocational education)</li> </ul>	<ul style="list-style-type: none"> <li>• Bachelor's degree honours (university/college)</li> </ul> <b>Further admission requirements for English-taught degree programmes:</b> <ul style="list-style-type: none"> <li>• Minimum GPA of 3 out of 4</li> </ul>
<b>BRAZIL</b>	<b>11 years of schooling</b> (all requirements must be met): <ul style="list-style-type: none"> <li>• <i>Certificado de Conclusão de Ensino Médio or Certificado de Conclusão do 2º Grau</i> concluded after 11 years of education</li> </ul> + Results of the <i>Exame Nacional do Ensino Médio (ENEM)</i> or <i>Vestibular</i> + one of the option listed on <a href="http://www.unipd.it/en/how-apply">www.unipd.it/en/how-apply</a> under the <i>Apply for a full degree programme &gt; Bachelor's degrees</i> tab  <b>12 years of schooling</b> (both requirements must be met): <ul style="list-style-type: none"> <li>• <i>Certificado de Conclusão de Ensino Médio or Certificado de Conclusão do 2º Grau</i> concluded after 12 years of education</li> </ul> + Results of the <i>Exame Nacional do Ensino Médio (ENEM)</i> or <i>Vestibular</i>	<ul style="list-style-type: none"> <li>• 4, or 5, or 6-years <i>Bacharel or Licenciado</i></li> </ul>



<p><b>CAMEROON</b></p>	<p>British system:</p> <ul style="list-style-type: none"> <li>• <i>General Certificate of Education</i> with Advanced Level in 2 subjects and Ordinary Level in at least 4 subjects</li> </ul> <p>French system:</p> <ul style="list-style-type: none"> <li>• <i>Baccalauréat de l'Enseignement Secondaire</i></li> </ul>	<p>British system:</p> <ul style="list-style-type: none"> <li>• At least 3-years Bachelor's degree</li> </ul> <p>French system:</p> <ul style="list-style-type: none"> <li>• At least 3-year Licence</li> </ul>
<p><b>CHINA</b></p>	<p>Both requirements must be met:</p> <ul style="list-style-type: none"> <li>• Senior middle school graduation certificate (普通高中毕业证书 <i>putong gaozhong biye zhengshu</i>) + the Verification report of China Secondary Education Qualification Certificate issued by CHESICC or by another relevant official institution</li> <li>• National College Entrance Examination - <i>Gaokao</i> (普通高等学校招生全国统一考试), with a score equal or higher to 400/750 + the Verification report of China Secondary Education Qualification Certificate issued by CHESICC or by another relevant official institution</li> </ul>	<p>Both requirements must be met</p> <ul style="list-style-type: none"> <li>• Bachelor degree certificate (学士学位证书 <i>xueshi xuwei hengshu</i>) after 4-years undergraduate programme (本科, <i>benke</i>) + CDGDC verification for each degree / certificate</li> <li>• Graduation certificate (毕业证书 <i>biye zhengshu</i>)</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 75 out of 100</li> <li>• Minimum GPA of 3.0 out of 5</li> <li>• Minimum GPA of 2.8 out of 4</li> </ul>
<p><b>COLOMBIA</b></p>	<p>Both requirements must be met:</p> <ul style="list-style-type: none"> <li>• <i>Bachiller Académico / Comercial / Técnico</i> certificate, obtained by passing the state exam (<i>Examen de Estado</i>) administered by the <i>Instituto Colombiano para la Evaluación de la Educación</i> (ICFES) + One of the option listed on <a href="http://www.unipd.it/en/how-apply">www.unipd.it/en/how-apply</a> under the <i>Apply for a full degree programme &gt; Bachelor's degrees</i> tab</li> </ul>	<ul style="list-style-type: none"> <li>• 4, or 5, or 6 or 7-years <i>Licenciado</i></li> </ul>

<p><b>EGYPT</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• General Secondary Education Certificate (<i>shahâdat itmâm al-dirâsa al-thânawiyya al-`âmma</i>)</li> <li>• Al-Azhar Secondary School Certificate (<i>al-shahâda l-thânawiyya l-azhariyya</i>)</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• 4 or 5-years Bachelor of Arts (<i>bakâlôriyûs âdâb</i>) degree</li> <li>• 4 or 5-years Bachelor of Science (<i>bakâlôriyûs `ulûm</i>) degree</li> <li>• 4 or 5-years Licence (<i>lîsâns</i>) degree</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 70 out of 100</li> <li>• Minimum GPA of 2.80 out of 4.00</li> </ul>
<p><b>ETHIOPIA</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Ethiopian School Leaving Certificate / Ethiopian Higher Education Entrance Examination (senior secondary general education)</li> <li>• Diploma (higher professional education)</li> </ul> <p>Additional requirement:</p> <ul style="list-style-type: none"> <li>• Grade point average (GPA) of at least 2.0 or at least 6 subjects with A, B or C for the Ethiopian School Leaving Certificate</li> </ul>	<ul style="list-style-type: none"> <li>• At least 3-year Bachelor's degree</li> </ul>
<p><b>FRANCE</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• <i>Baccalauréat Général / Technologique / Professionnel</i></li> <li>• <i>Diplôme de Bachelier de l'Enseignement Franco-Allemand du Second Degré</i></li> <li>• <i>Option International du Baccalauréat</i></li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• <i>Licence</i> (university education)</li> <li>• <i>Licence professionnelle</i> (higher professional education)</li> </ul>
<p><b>GERMANY</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• <i>Zeugnis der Allgemeine Hochschulreife / Abitur</i> (General Higher Education Entrance Qualification)</li> <li>• <i>Zeugnis der Fachgebundenen Hochschulreife</i> (for related programs only)</li> </ul>	<ul style="list-style-type: none"> <li>• At least 3-year Bachelor's Degree</li> </ul>
<p><b>GHANA</b></p>	<p>Both requirements must be met:</p> <ul style="list-style-type: none"> <li>• West African Senior Secondary School Certificate (<i>WASSCE</i>), at least 6 subjects – English language and Mathematics included – with grades ranging from A1 to C6)</li> </ul> <p>+ WAEC scratch card</p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• at least 4-year Bachelor's Degree</li> <li>• 3-year Higher National Diploma + last 2 years of a Bachelor's Degree</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 3.3 out of 4.00</li> <li>• Minimum GPA of 60 out of 100</li> </ul>

<p><b>GREECE</b></p>	<p>Both requirements must be met:</p> <ul style="list-style-type: none"> <li>• <i>Apolytirio Genikou Lykeiou</i> with minimum average grade of 10 out of 20 + Successful completion of the <i>Πανελλήνιες Εξετάσεις / Panellinies Exetaseis</i> (Panhellenic Examinations) and obtainment of the <i>Βεβέωση Πρόσβασης / Veveosi Prosvasis</i></li> </ul>	<ul style="list-style-type: none"> <li>• 4 or 5-years <i>Ptychio</i> (AEI)</li> </ul>
<p><b>INDIA</b></p>	<p>One of the following Standard XII diplomas</p> <ul style="list-style-type: none"> <li>• All-India Senior School Certificate (SSC) of the CBSE (Central Board of Secondary Education), with at least 5 courses</li> <li>• Indian school certificate (ISC - Year 12) awarded by the CISCE (Council for the Indian School Certificate Examination), with at least 5 subjects</li> <li>• Intermediate Examination Certificate</li> <li>• Higher Secondary School Certificate</li> <li>• Higher Secondary Examination Certificate Part II</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• 3-years Honours Bachelor Degree</li> <li>• 4, or 5, or 5 and ½-year Professional Bachelor Degree</li> <li>• 3-years Pass/General Bachelor Degree + Postgraduate Bachelor's degree or at least a 1-year Master's degree</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 60 out of 100</li> <li>• Minimum GPA of 7 out of 10</li> <li>• Minimum GPA of 5.6 out of 8</li> <li>• Minimum GPA of 2.8 out of 4</li> </ul>
<p><b>INDONESIA</b></p>	<p><b>Qualifications obtained before 2019 (included):</b></p> <ul style="list-style-type: none"> <li>• <i>Ijazah Sekolah Menengah Atas, SMA</i> (Senior Secondary School Certificate) + <i>Surat Keterangan Hasil Ujian Nasional</i></li> </ul> <p><b>Qualifications obtained from 2020 onwards:</b></p> <ul style="list-style-type: none"> <li>• ONLY <i>Ijazah Sekolah Menengah Atas, SMA</i> (Senior Secondary School Certificate)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Sarjana Stratum satu, S I</i> degree</li> </ul>

<p><b>IRAN</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Certificate of completion of secondary education (<i>Diplom-e-Motevasete</i>) + certificate of completion of the pre-university year (<i>Dowre-ye pish dâneshgâhî</i>)</li> <li>• Certificate of completion of secondary education obtained from the academic year 2018/19</li> <li>• Associate Degree (<i>Kârdânî</i>)</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• 4 or 5- year Bachelor's Degree (<i>kârshenâsî</i>)</li> <li>• 2-year Associate Degree (<i>Kârdânî</i>) + 2-year Discontinuous Degree (<i>kârshenâsi-napayvasteh</i>)</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 14,50 out of 20</li> </ul>
<p><b>IRAQ</b></p>	<ul style="list-style-type: none"> <li>• Secondary School Certificate wathîqa (وثيقة مدرسية / المرحلة الإعدادية) – madrasiyya / al-marhalla al-i'dâdiyya)</li> </ul>	<ul style="list-style-type: none"> <li>• 4, 5 or 6-year Bachelor's degree البكالوريوس (al-bakâlûriyyûs)</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA 70 out of 100</li> </ul>
<p><b>ISRAEL</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Secondary Education Certificate (<i>Teudat Bagrut</i>) with more than 21 units and a minimum of 4 units in certain subjects (including English and Mathematics)</li> <li>• Professional Certificate + Practical Engineer/Handassai</li> </ul>	<ul style="list-style-type: none"> <li>• 3 or 4-year Bachelor's degree</li> </ul>
<p><b>JORDAN</b></p>	<p>One of the following</p> <ul style="list-style-type: none"> <li>• General Secondary Education Certificate (<i>Tawjihî</i>)</li> <li>• Vocational Secondary Education Certificate + Intermediate Diploma</li> </ul>	<ul style="list-style-type: none"> <li>• 4, 5 or 6-year Bachelor's degree</li> </ul>

<p><b>KAZAKHSTAN</b></p>	<p>11 years of schooling</p> <p>One of the following:</p> <ul style="list-style-type: none"> <li>Жалпы Орта білім туралы аттестат / Аттестат об общем среднем образовании (<i>Attestat</i> - Diploma of Completed Secondary secondary Education)</li> <li>Кәсіптік орта білім туралы диплом / Диплом о профессиональном образовании (Diploma of secondary vocational education)</li> </ul> <p>+ one of the options listed at <a href="http://www.unipd.it/en/how-apply">www.unipd.it/en/how-apply</a> under the <i>Apply for a full degree programme &gt; Bachelor's degrees</i> tab</p> <p>12 years of schooling</p> <ul style="list-style-type: none"> <li><i>Nazarbayev Intellectual Schools</i> (NIS) Grade 12 Certificate (general secondary education)</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Бакалавр дипломы / Диплом бакалавра / <i>Bakalavr Diplomu</i> (4-years Bachelor's degree)</li> <li>Мамаң дипломы/Диплом Специалист (Specialist diploma)</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>Minimum GPA of 3.00 out of 4.00</li> <li>Minimum GPA of 80 out of 100</li> <li>Minimum grade of B (letters grading scale)</li> </ul>
<p><b>LEBANON</b></p>	<ul style="list-style-type: none"> <li>Baccalauréat général libanais (<i>Shahaadat Al-Bakaalouriya al Lubnaaniya l'il-ta 'liim al-Thaanawi</i>)</li> </ul>	<ul style="list-style-type: none"> <li>Bachelor 's degree / Licence / <i>Bakâlôriyûs</i></li> </ul>
<p><b>MALAYSIA</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li><i>Sijil Tinggi Persekolahan Malaysia</i> - STPM (Malaysian Higher School Certificate)</li> <li>Matriculation Certificate</li> <li>Unified Examination Certificate (with an average score of 75% or higher)</li> </ul>	<ul style="list-style-type: none"> <li>3, 4 or 5-years Bachelor's degree</li> </ul>
<p><b>MOROCCO</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>شهادة البكالوريا / <i>Attestation du Baccalauréat</i> (upper secondary general education)</li> <li><i>Baccalauréat d'enseignement technologique et professionnel</i> (BETP)</li> </ul>	<p>Of the following:</p> <ul style="list-style-type: none"> <li>الإجازة في الدراسات الأساسية / Licence d'Études Fondamentales</li> <li>الإجازة المهنية / Licence Professionnelle</li> </ul>

<b>NETHERLANDS</b>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• <i>Voorbereidend Wetenschappelijk Onderwijs diploma</i> (VWO - Pre-university education)</li> <li>• <i>Hoger Beroepsonderwijs propedeuse</i> (HBO - Higher professional education first-year certificate)</li> <li>• <i>Middelbaar Beroepsonderwijs</i> (MBO - Senior secondary vocational education and training)</li> </ul>	<ul style="list-style-type: none"> <li>• Bachelor's degree</li> </ul>
<b>NIGERIA</b>	<ul style="list-style-type: none"> <li>• West African Senior School Certificate (WASSC, issued by WAEC), with a final result of A1, B2-3, C4-6 for at least 6 subjects</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• at least 4-year Bachelor's Degree</li> <li>• 2-year Higher National Diploma + last 2-year Bachelor's Degree</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 3.5 out of 5</li> </ul>
<b>PAKISTAN</b>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Higher Secondary School Certificate (HSSC)</li> <li>• Intermediate School Certificate</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• 2-year Bachelor (Pass) + 2-year Master's Degree</li> <li>• 2-year Bachelor (Pass) + Bachelor of Law (LL.B.)</li> <li>• 2-year Bachelor pass + Bachelor of Education (3 years total)</li> <li>• 3-year Bachelor (Honours)</li> <li>• 4 or 5-year Professional Bachelor</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>• Minimum GPA of 3.00 out of 4.00</li> </ul>
<b>RUSSIA</b>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Аттестат о среднем общем образовании / <i>Attestat o srednem obshchem obrazovanii</i> (Certificate of Complete General Secondary Education)</li> <li>• Диплом о среднем профессиональном образовании / <i>Diplom o srednem professionalnom obrazovanii</i> (secondary vocational education)</li> </ul> <p>+ Единый Государственный Экзамен (Uniform State Exam)</p> <p><b>For qualifications obtained after 11 years of schooling:</b></p> <ul style="list-style-type: none"> <li>• The entry qualification must be integrated with one of the options listed on <a href="http://www.unipd.it/en/how-apply">www.unipd.it/en/how-apply</a> under the <i>Apply for a full degree programme &gt; Bachelor's degrees</i> tab</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Диплом бакалавра / <i>Diplom Bakalavra</i> (Bachelor diploma)</li> <li>• Диплом специалиста / <i>Diplom Specialista</i> (Specialist diploma)</li> </ul>

<b>SAUDI ARABIA</b>	<ul style="list-style-type: none"> <li>General Secondary Education Certificate (<i>Tawjihiyah</i>)</li> </ul>	<ul style="list-style-type: none"> <li>4, or 5, or 6-year Bachelor's degree</li> </ul>
<b>SERBIA</b>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Диплома о стеченом средњем образовању / <i>Diploma o stečenom srednjem obrazovanju</i> (Diploma of completed secondary education)</li> <li>Диплома / Уверење о положеном матурском испиту / <i>Diploma / Uverenje o položenom maturskom ispitu</i> (Diploma/Statement of the completed matura exam)</li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>Академски назив / <i>Akademski naziv</i> (3-year Bachelor's degree)</li> <li>Дипломирани / <i>Diplomirani</i> (4-year Bachelor's degree)</li> </ul>
<b>SPAIN</b>	<p>Both requirements must be met:</p> <ul style="list-style-type: none"> <li><i>Título de Bachiller</i> + university entrance examination (<i>EBAU - Evaluación de Bachillerato para el Acceso a la Universidad</i> OR <i>EVAU - Evaluación para el Acceso a la Universidad</i>)</li> </ul>	<ul style="list-style-type: none"> <li>4-year <i>Título de Graduado</i></li> </ul>
<b>SRI LANKA</b>	<ul style="list-style-type: none"> <li>General Certificate of Education (Advanced Level) with at least an Ordinary Pass (S) for 3 subjects and a score of at least 30% for the Common General Test</li> </ul>	<ul style="list-style-type: none"> <li>4-year Bachelor's degree</li> <li>Special Degree programme</li> </ul>
<b>SYRIA</b>	<ul style="list-style-type: none"> <li>General Secondary Certificate Education (<i>Al Shahâda Al Thâniyya al-Imma</i>)</li> </ul>	<ul style="list-style-type: none"> <li>4, or 5, or 6-year Bachelor's degree or Licence</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>Minimum GPA of 75 out of 100</li> </ul>
<b>SUDAN</b>	<ul style="list-style-type: none"> <li>Sudan Secondary School Certificate, having passed at least 7 subjects</li> </ul>	<ul style="list-style-type: none"> <li>4-year Bachelor's degree</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>Minimum GPA of 65 out of 100</li> <li>Minimum GPA of 2.5 out of 4.00</li> </ul>
<b>THE GAMBIA</b>	<ul style="list-style-type: none"> <li>West African Senior Secondary School Certificate (WASSCE), at least 5 subjects – English language, Mathematics and Social science included – with grades ranging from A to C</li> </ul>	<ul style="list-style-type: none"> <li>at least 4 - years Bachelor's degree</li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>Minimum GPA of 3.3 out of 4.3</li> </ul>

<p><b>TUNISIA</b></p>	<ul style="list-style-type: none"> <li>● البكالوريا / <i>Baccalauréat</i></li> </ul>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>● الأساسية الإجازه / <i>Licence Fondamentale</i></li> <li>● التطبيقية الإجازه / <i>Licence Professionnelle</i> (sometimes called <i>Licence Appliquée</i>)</li> </ul>
<p><b>TURKEY</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>● <i>Lise Diploması</i></li> <li>● <i>Teknik Lisesi Diploması</i></li> </ul> <p>Additional requirement:</p> <ul style="list-style-type: none"> <li>● at least 0.5 points in each of the following entrance examination tests: the Temel Yeterlilik Testi (TYT - Basic Proficiency Test) and the Yükseköğretim Kurumları Sınavı (YKS - Higher Education Institutions Exam)</li> </ul> <p><b>Note:</b> from 2010 to 2018, the entrance examinations were the <i>Yükseköğretime Geçis Sınavı</i> (YGS - Higher Education Entrance Exam) and the <i>Lisans Yerleştirme Sınavı</i> (LYS - Undergraduate Placement Exam)</p>	<ul style="list-style-type: none"> <li>● <i>Lisans Diploması</i></li> </ul> <p><b>Further admission requirements for English-taught degree programmes:</b></p> <ul style="list-style-type: none"> <li>● Minimum GPA of 2.70 out of 4.00</li> </ul>
<p><b>UKRAINE</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>● Атеста́т про загалну середню освіту / <i>Atestat pro zagal'nu serednyu osvitu</i> (Certificate of Complete General Secondary Education). Since 2019 Свідо́цтво про здобуття повної загалної середньої освіти/<i>Svidotstvo pro zdobuttia povnoi zagalnoi serednoi osvity</i></li> <li>● Диплом молодшого спеціаліста / <i>Dyplom molodshogo spetialista</i> (Junior Specialist diploma)</li> </ul> <p>+ for qualifications obtained from 2008 onwards Зовні́шне незале́жне оцінюва́ння / External Independent Testing (EIT)</p> <p>+ one of the options listed on <a href="http://www.unipd.it/en/how-apply">www.unipd.it/en/how-apply</a> under the <i>Apply for a full degree programme &gt; Bachelor's degrees</i> tab</p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>● Бакалавр / <i>Bakalavr</i> (Bachelor's degree)</li> <li>● Спеціаліст / <i>Spetsialist</i> (Specialist)</li> </ul>



<p><b>USA</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• High School Diploma + 3 US "Advanced Placements" (APs) with a score from 3 to 5, in three different subjects related to the university course selected. The exams report must be issued by the College Board;</li> <li>• High School Diploma integrated with at least one year of attendance with passing all the exams required in the first year of a course at university level</li> </ul> <p><b>Note:</b> The holding of an "AP" in Italian will be a mandatory requirement only for students with foreign citizenship. An "AP" in Italian will not be acceptable in the case of students with Italian citizenship or in the case of enrolment in courses taught entirely in English.</p> <p>For further information, please check <a href="#">Annex 1</a> of the Ministerial Circular.</p>	<ul style="list-style-type: none"> <li>• 4 or 5-year Bachelor's Degree</li> </ul>
<p><b>UK (ENGLAND, GALLES AND NORTHERN IRELAND)</b></p>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• <i>General Certificate of Education (GCE, or International General Certificate of Education IGCE</i> if issued outside the UK) issued by official certification bodies of the United Kingdom, with successful completion of 3 subjects at an advanced level (<i>A level</i>), relevant to the degree programme of interest and passed with at least a minimum grade (passing grade - E);</li> <li>• <i>Cambridge Pre-U Diploma = 3 Pre-U Principal Subjects + Global Perspective and Research</i></li> <li>• A combination of 3 different subjects between <i>A level</i> and <i>Pre-U Principal Subjects</i></li> <li>• <i>BTEC Level 3 National Diploma or BTEC Level 3 National Extended Diploma</i></li> </ul> <p><b>Note:</b> The presence of an <i>A level</i> or a <i>Pre-U Principal Subject</i> in Italian will be requested only of students with foreign citizenship. An <i>A level</i> or <i>Pre-U Principal Subject</i> in Italian language will not be considered for candidates with an Italian citizenship and/or for enrolment in degree programmes completely held in English.</p> <p>For further information, please check <a href="#">Annex 1</a> of the Ministerial Circular.</p>	<ul style="list-style-type: none"> <li>• 3 or 4-year Honours Bachelor Degree</li> </ul>

<b>UK (SCOTLAND)</b>	<ul style="list-style-type: none"> <li>• <i>Scottish Qualification Certificate (SQC)</i> with successful completion of 3 subjects <i>Advanced Highers</i>, or 2 <i>Advanced Highers</i> and at least 4 <i>Higher</i></li> </ul> <p>For further information, please check <a href="#">Annex 1</a> of the Ministerial Circular.</p>	<ul style="list-style-type: none"> <li>• 3 or 4-year Honours Bachelor Degree</li> </ul>
<b>VIETNAM</b>	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• <i>Bằng Tốt Nghiệp Trung Học Phổ Thông</i> (Certificate of secondary school graduation)</li> <li>• <i>Bằng Trung học chuyên nghiệp</i> (Diploma of Secondary Vocational Education)</li> </ul> <p>+ <i>Bằng Tốt Nghiệp Cao Đẳng Cử Nhân Cao Đẳng</i> (Associate Degree)</p>	<ul style="list-style-type: none"> <li>• <i>Bằng Tốt Nghiệp Đại Học</i> (University graduation certificate) obtained after at least 4-year Bachelor's degree programme and stating the Bachelor's degree obtained (<i>Cử Nhân</i>)</li> </ul>
<b>YEMEN</b>	<ul style="list-style-type: none"> <li>• General Secondary Education Certificate (<i>Al Thanawiya</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• 4, or 5, or 6-year Bachelor's degree</li> </ul>







**Allegato n° 3 - Schemi di Piano di studio ad approvazione automatica (comma 5)**

**Master's Degree Program in Energy Engineering (2023 Cohort)  
Automatic Study Plan**

<b>COMPULSORY ACTIVITIES - FIRST YEAR</b>		
<b>Codes</b>	<b>Activities</b>	<b>CFUs</b>
INQ1097798	APPLIED ENERGY	9
INQ1097819	ENERGY SYSTEMS	9
INQ1097770	MEASUREMENTS AND INSTRUMENTATION	9
INQ0091663	COMBUSTION	6
INQ0091666	HEAT TRANSFER AND THERMOFLUID DYNAMICS	9
INQ1097820	ELECTRIC POWER SYSTEMS	9
INP9087943	ENGLISH LANGUAGE B2 (PRODUCTIVE SKILLS)	3
<b>COMPULSORY ACTIVITIES - SECOND YEAR</b>		
<b>Codes</b>	<b>Activities</b>	<b>CFUs</b>
INQ0091703	RENEWABLE ENERGY TECHNOLOGIES	9
INQ0091702	ENERGY ECONOMICS	9

<b>CONSTRAINED CHOICE ELECTIVE ACTIVITIES (15 CFUs)</b> <i>Attività caratterizzanti opzionali</i>		
<b>Codes</b>	<b>Course Units</b>	<b>CFUs</b>
INQ1097338	PROCESS TECHNOLOGIES FOR CARBON-NEUTRAL FUELS	6
INQ0091679	COGENERATION AND COMBINED PLANTS	6
INQ0091664	NUCLEAR FISSION AND FUSION PLANTS	9
INQ0091678	GREEN POWER CONVERSION AND UTILIZATION	6
INQ2100369	WIND AND HYDRAULIC TURBINES	9
INQ0091662	HEATING VENTILATION AIR CONDITIONING SYSTEMS	9
INQ2100363	ENERGY AND BUILDINGS	6



Dipartimento di Ingegneria Industriale DII

INQ2100440	REFRIGERATION AND HEAT PUMP TECHNOLOGY	9
------------	--	---

<b>FREE CHOICE ELECTIVE ACTIVITIES</b> (15 CFUs; maximum two laboratories can be selected)		
<b>Codes</b>	<b>Course Units</b>	<b>CFUs</b>
INQ0091667	ADVANCED CONTROL SYSTEMS	6
INP9087853	PHOTOVOLTAIC SCIENCE AND TECHNOLOGY	6
INQ1097949	DESIGN AND OPTIMIZATION OF SUSTAINABLE ENERGY SYSTEMS	6
INQ0091721	APPLIED ACOUSTIC AND DESIGN FOR PRODUCT SOUND QUALITY	6
	LABORATORY OF APPLIED THERMODYNAMICS	3
INQ1097950	LABORATORY OF COMPUTATIONAL THERMO-FLUID DYNAMICS	3
INQ1097951	LABORATORY OF ENERGY AUDIT	3
<b>You may also include <i>constrained choice elective activities (attività caratterizzanti opzionali)</i> not already selected.</b>		

<b>MASTER'S THESIS</b>		
<b>Codes</b>	<b>Activities</b>	<b>CFUs</b>
INQ1098160	MASTER'S THESIS	18