**“*Additive Manufacturing: from the design to the final component*”**

CONTRIBUTO AREA DISEGNO

* Giampiero Donnici e Gian Maria Santi “*Topology Optimization for Additive Manufacturing*” (2-2.5 h)

Mail: giampiero.donnici@unibo.it, gianmaria.santi2@unibo.it

CONTRIBUTO AREA TECNOLOGIA METALLI

* Erica Liverani: “*Technological aspects of additive manufacturing for metals: processes overview, potentialities and challenges*.” (2 h)

Mail: erica.liverani2@unibo.it

CONTRIBUTO AREA METALLURGIA

* Lavinia Tonelli: *“Metallurgical aspects of additively manufactured metals: feedstock, microstructure, post-process heat treatments and mechanical properties"* (2-3 h).

Mail: lavinia.tonelli2@unibo.it

CONTRIBUTO AREA COSTRUZIONE DI MACCHINE METALLI

* Massimiliano De Agostinis*: “Design guidelines for additive manufacturing”* (2 h)

Mail:m.deagostinis@unibo.it

* Giorgio Olmi*: “Fatigue response of Maraging and Stainless Steels produced by Powder Bed Fusion (PBF)”* (1-2 h)

Mail:giorgio.olmi@unibo.it

CONTRIBUTO AREA TECNOLOGIA POLIMERI

* Mattia Mele: “*The main technological aspects of polymer Additive Manufacturing illustrated through advanced processes”* (2h)

Mail: mattia.mele@unibo.it

CONTRIBUTO AREA COSTRUZIONE DI MACCHINE POLIMERI/COMPOSITI

* Luca Raimondi & Gregorio Pisaneschi: “*3D Printing Use Cases: Hybrid Metal Composite Joints & Medical Implants (1-2 h)*

Mail: luca.raimondi@unibo.it, gregorio.pisaneschi@unibo.it

CONTRIBUTO AREA Meccanica Applicata (Carricato):

* Edoardo Idà: “*An introduction to Fused Deposition Modelling: benefits, limitations, and practical design rules for prototyped components*" (2-3 ore)

Mail: edoardo.ida2@unibo.it

**Course Scheduling**

|  |  |  |
| --- | --- | --- |
| **Slot** | **Lecture** | **Date and time** |
| **1** | Erica Liverani: “*Technological aspects of additive manufacturing for metals: processes overview, potentialities and challenges*.” (2 h) | **9.15-11.15** | **19/01/2022** |
| Giampiero Donnici e Gian Maria Santi “*Topology Optimization for Additive Manufacturing*” (2 h) | **11.30-13.30** |
| **2** | Lavinia Tonelli: *“Metallurgical aspects of additively manufactured metals: feedstock, microstructure, post-process heat treatments and mechanical properties"* (2 h 30 min) | **9.00 – 11.30** | **27/01/2022** |
| Giorgio Olmi*: “Fatigue response of Maraging and Stainless Steels produced by Powder Bed Fusion (PBF)”* (1 h 40 min) | **11.50 – 13.30** |
| **3** | Massimiliano De Agostinis*: “Design guidelines for additive manufacturing”* (2 h) | **14.00 – 16.00** | **02/02/2022** |
| Luca Raimondi & Gregorio Pisaneschi: “*3D Printing Use Cases: Hybrid Metal Composite Joints & Medical Implants* (1 h 40 min) | **16.20 – 18.00** |
| **4** | Mattia Mele: “*The main technological aspects of polymer Additive Manufacturing illustrated through advanced processes”* (2 h) | **9.00 -11.00** | **11/02/2022** |
| Edoardo Idà: “*An introduction to Fused Deposition Modelling: benefits, limitations, and practical design rules for prototyped components*" (2 h) | **11.30-13.30** |

**DATE ALTRE SEMINARI**

**Short course on DOE:**

30/11/ 2021, h. 9-12;

02/12/2021 h. 9-13

**Data driven Methods in Engineering:**

29/11/2021, h. 10-12;

03/12/2021, h. 15-17;

06/12/2021, h. 10-12;

10/12/2021, h. 15-17;

13/12/2021, h. 10-12;