occupants' behaviour on building energy use. Energy and Buildings 42(2): 173-177. https://doi.org/10.1016/j.enbuild.2009.08.009

- [6] Majumdar A, Zhang ZR, Albonesi DH. (2016). Characterizing the benefits and limitations of smart building meeting room scheduling. Presented at Conference IEEE Available: 978-1-5090-1772-0.
- [7] Song K, Kim S, Park M, Lee HS. (2017). Energy efficiency-based course timetabling for university buildings. Energy 139: 394-405. https://doi.org/10.1016/j.energy.2016.07.176.
- Sethanan K, Theerakulpisut S, Benjapiyaporn C. (2014). Improving energy efficiency by lecture room scheduling: a case study in a Thai University. Advanced Material Research 931-932: 1089-1095. https://doi.org/10.4028/www.scientific.net/AMR.931-932.1089
- [9] Decreto n. 6480 del 30 luglio 2015 Allegato H- Metodo di Calcolo - Disposizioni in merito alla Disciplina per l'efficienza energetica degli edifici e per il relativo attestato di prestazione energetica a seguito della DGR 3868 del 17.7.2015

NOMENCLATURE

a	stands for air
Afl	surface of the floor [m ²]
Btr,i	dimensionless, adjustment element of heating exchange between the heated room and the not-
	TS 113000-1:2014)
c	denotes the cardinal orientation, dimensionless
d	day of the period, number
DD	Degree Day
ECs	semester energy consumption [kWh]
ER	stands for Electrical Requirement per hour [kWh/h]
fx	utilization factor of heat losses, depending on the thermal inertia of the building and the ratio between free inputs and dispersions, assumed
	equal to 0.95, dimensionless
h	number of hours of heating season [h]
hl,i	working hours of lecture l in lecture room i, [h]

Ht coefficient of transmission, heat exchange [W/°K]

Hv	coefficient of ventilation, heat exchange [W/°K]
i	denotes the lecture room, dimensionless
i	number of surfaces, dimensionless
Isun,ex	total seasonal irradiance (in the heating period) on
	the vertical plane [kWh/m ²], for each x-th
	exposure.
k	single and specific air exchange for ventilation,
	dimensionless
L	number of lamps
1	number of lectures of the semester, i.e. 184,
	dimensionless
n	denotes the type of lamps in a lecture room
Nz	the number of days in the z-month considered,
	assuming the daily energy requirement, the
	coefficient will have a unitary value
Р	power of the lamp [kW]
Q int	free internal intake
Qc	denotes the cooling requirement [kWh/h]
Qh	denotes the heating requirement [kWh/h]
r	reduction adjustment element, taking into account
	the presence of transparent elements and medium
	shading, set to 0.2, dimensionless
S	denotes the season, dimensionless
Sj	dimension of surface j [m ²]
Sw,j	window area of surface j [m ²]
t	denotes the timeslot, dimensionless
Te	external temperature [°K]
TR	stands for Thermal Energy Requirement [kWh/h]
Ui	transmittance of surface I [W/m ² °K]
Va,k	k-th average daily air flow rate due to natural
	ventilation or aeration and / or infiltration of the
	area or mechanical ventilation, $[m^3/s]$
Х	coefficient for the percentage of heating system
	switched on
у	coefficient for the percentage of lamps switched
	on, dimensionless
θe	average monthly value of the daily outdoor
	temperature [°K]
θi	Setting of the internal temperature of the thermal
	zone considered [°K]
pa*ca	volume thermal capacity of the air, equal to 0.34
φint	input produced by the internal heat sources [W/m ²]
	(according to the Standard UNI TS 113000-

1:2014, Table 7)