# Homework No.1

The values of the load in the Power System of Republic N. Macedonia for different days (every 3rd Wednesday of every month) are given in Table 1. Each student needs to analyze their respective given day according to the number assigned in the Table.

**Table 1. Load values in the Power System of Republic N. Macedonia**

| # | Surname and Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Nikolov Filip | 730 | 641 | 584 | 553 | 557 | 541 | 582 | 643 | 771 | 849 | 822 | 921 | 881 | 886 | 906 | 836 | 831 | 792 | 813 | 814 | 930 | 988 | 900 | 801 |

With the application of Excel draw the daily load curve and determine its basic characteristics $P_{min}$, $P_{max}$, the energy ($W$), the load factor ($f$), the average load ($P_{sr}$), the time of maximum power ($T_{max}$) and the ratio between the daily minimum and maximum ($m$). After that, draw the ordered load diagram (load duration curve) and the inverse load duration curve and make their approximation with a line or a polynomial function.

***Issued on 14.10.2021, Deadline 22.10.2021***