Astronomy

Type of studies:

3-year studies, finishing with a bachelor's degree.

All candidates who have met all the requirements of admission and received the highest number of points will be admitted within the limit of places.
Common ranking list will be created for candidates with the "new" and "old" secondary school certificate on the basis of secondary school exams in the subjects covered by the rules of recruitment.

Recruitment rules:

Number of points for the ranking list is calculated as the weighted average number of points corresponding to the results of the matriculation examination ("new" or "old" secondary school certificate) in the subjects covered by the rules of recruitment.
Numbers of points (marked R) are calculated according to the formula:

$$R = 0{,}20m1 + 0{,}20m2 + 0{,}05p1 + 0{,}05p2 + 0{,}05o1 + 0{,}05o2 + 0{,}20d1 + 0{,}20d2$$

where: m1, m2 - points for subject mathematics,
p1, p2 - points for subject Polish,
o1, o2 - points for subject modern foreign language,
d1, d2 - points for subject physics and astronomy, if missing - points for subject computer science;

Interpretation of the symbols for the "new" high school certificate:

m1 - points for the written part of the matriculation examination in mathematics at elementary level,
m2 - points for the written part of the matriculation examination in mathematics at the advanced level,
p1 - points for the written part of the matriculation examination in Polish at elementary level,
p2 - points for the written part of the matriculation examination in Polish at the advanced level,
o1 - points for the written part of the matriculation examination in modern foreign language at elementary level,
o2 - points for the written part of the matriculation examination in modern foreign language at the advanced level,
d1 - points for the written part of the matriculation examination in physics and astronomy at elementary level punkty (if missing for computer science),
d2 - points for the written part of the matriculation examination in physics and astronomy at the advanced level punkty (if missing for computer science),;

Interpretation of the symbols for the "old" high school certificate:

m1 - points for the oral part of the matriculation examination in mathematics,
m2 - points for the written part of the matriculation examination in mathematics,
p1 - points for the oral part of the matriculation examination in Polish,
p2 - points for the written part of the matriculation examination in Polish,
o1 - points for the oral part of the matriculation examination in modern foreign language,
o2 - points for the written part of the matriculation examination in modern foreign language,
d1 - points for the oral part of the matriculation examination in physics (if missing for computer science informatyki),
d2 - points for the oral part of the matriculation examination in physics (if missing for computer science informatyki).

Grades obtained in the matriculation exam ("old" high school certificate) are converted into points as follows:

6 grade scale: excellent -90 pts., very good -75 pts., good-60 pts., satisfactory-45 pts., acceptable-30 pts.;
4 grade scale: very good-90 pts., good-60 pts., satisfatory-30 pts..

In the case of the "new" high school certificate to the recruitment procedure the number of points obtained for the high school certificate exams is accepted.

If points or grades for the respective exam in a particular subject are missing, to the ranking the number of points zero is taken, but:

If the certificate of maturity ("new" high school certificate) points are given for a subject only at the advanced level, and in the recruitment rules points for elementary level are also considered, for elementary level points for the advanced level are taken into account,
If the certificate of matriculation exam ("old" high school certificate) there is no grade for a written exam in a given subject, and in the recruitment rules such grade is considered, the grade for an oral exam is taken into account and vice versa, if there is no grade for oral exam in a given subject, the grade for a written exam in this subject is taken into account.
As equivalent subjects for computer science are accepted subjects named: elements of computer science, basic computer science or information technology; as equivalent subjects for physics and astronomy are accepted subjects named: physics, physics with astronomy.

The exemption from the matriculation examination in a foreign language basing on a certificate is equivalent to obtaining excellent grade ("old" high school certificate) or maximum number of points ("new" high school certificate) for this subject.

Limit of places: 30

Recruitment calendar:

Receiving documents: 24.06. - 06.07.2013.
Announcement of lists of qualified to acceptance and not qualified: to 15.07.2013r.
Sending confirmation by qualified: to 26.07.2013.
Announcement of lists of accepted and not accepted: to 31.07.2013.

Specialty:

Computer astrophysics

Course plans

Undergraduate profile:

Has knowledge of astronomy and physics based on solid foundations of mathematical and natural sciences. Understands and is able to describe natural phenomena, formulate a research problem and to gather, process and communicate information. Knows a foreign language at level B2 of the European Framework of Reference for Languages of the Council of Europe and is able to use the specialistic language in the field of physical sciences. Is prepared to take job connected with designing, manufacturing, operation and maintenance of modern navigation, observation, measurement, diagnostic and teletransmission devices. Is prepared to work in education (after graduating from teaching specialties - in accordance with the relevant regulation of the minister responsible for higher education concerning the teacher training standards). Undergraduates are prepared to embark on the second stage of studies.
During the course students get to know modern information technologies by studying the physical processes in the universe. In this sense, the proposed course scheme is significantly different from conventional astronomical studies. Specialist subjects in the program focus on computer simulations of astrophysical processes (including generating data synthetic) and analysis of synthetic and observational digital data. Best undergraduates will have the opportunity to take Master's degree studies in the area of computer astrophysics (or in any other science area) and and third-degree doctoral studies leading to a doctoral degree. However, the vast majority of undergraduates will be able to find employment in various institutions where digital data are processed and analyzed in bulk (industry, telecommunication, banking, medicine, etc.). Our undergraduates are not only comfortable with computer techniques, but also have programming skills (including system programming), computer network support, and above all, comprehensive analysis and processing of digital data. General scientific education in physics, astronomy and astrophysics, characteristic for a broad-minded thinking and skills in non-standard approach to solving a variety of problems, should be an asset on the job market of new technologies. Despite the fact that our undergraduates will not have formal education in computer science, information technology skills they possess will definitely prove attractive on the labor market.

Department Website: www.wfa.uz.zgora.pl
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